11/21/88 U8130-1 A

# OKLAHOMA BUSINESS BULLETIN

CENTER FOR ECONOMIC AND MANAGEMENT RESEARCH
COLLEGE OF BUSINESS ADMINISTRATION
THE UNIVERSITY OF OKLAHOMA

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## SUMMARY OF INDICATORS

| Category | 8 Mos. '88 | 8 Mos. '87 | Aug. '88 | Percentage Change<br>8 Mos. '88/'87 | Percentage Change<br>Aug./July '88 |
|---|---|---|---|---|---|
| **Personal Income (Monthly Average)** | | | | | |
| Unadjusted ($000,000) | 3,620 | 3,399 | 3,687 | 6.5 | 0.2 |
| Adjusted for CPI ($000,000) | 3,086 | 3,013 | 3,098 | 2.4 | -0.3 |
| **Crude Oil Production (000 bbl)**[a] | 70,575 | 72,464 | 9,700 | -2.6 | -2.3 |
| **Natural Gas Production (000 mcf)**[a] | 1,280,270 | 1,174,572 | 141,237 | 9.0 | -13.7 |
| **Industrial Power Sales (000,000 Kwh)**[b] | 5,651 | 5,413 | 764 | 4.4 | 1.0 |
| **Total Bank Deposits (Monthly Average) ($000,000)**[c] | | | | | |
| Demand | 7,587 | 7,506 | 7,559 | 1.1 | -0.6 |
| Savings | 24,505 | 25,625 | 24,271 | -4.4 | -0.6 |
| **Savings and Loan Associations ($000,000)** | | | | | |
| Assets | 10,408 | 9,987 | 10,825 | 4.2 | 3.5 |
| Mortgage Loans Closed | 443 | 681 | 75 | -34.9 | 27.1 |
| **Employment**[d] | | | | | |
| Total Labor Force | 1,522.2 | 1,568.9 | 1,499.1 | -3.0 | -1.2 |
| Total Employment | 1,421.5 | 1,448.6 | 1,400.3 | -1.9 | -1.5 |
| Unemployment Rate | 6.6 | 7.9 | 6.6 | — | — |
| **General Business Index** | 94.6 | 93.6 | 95.3 | 1.1 | 0.8 |

Note: Includes revisions.

[a] 7 months and July data.

[b] Sales of larger privately owned utility companies.

[c] Total deposits of all depository institutions.

[d] Civilian Labor Force.

## RETAIL TRADE IN SELECTED CITIES
($000)

| City | Aug. '88<br>Adjusted | Aug. '88<br>Unadjusted | Adjusted<br>'88/'87<br>8 Mos. | Adjusted<br>1988<br>Aug./July |
|---|---|---|---|---|
| Ada | 15,101 | 14,967 | 3.0 | 1.7 |
| Altus | 13,195 | 12,946 | 4.1 | -4.7 |
| Alva | 4,241 | 4,316 | 5.1 | -3.7 |
| Anadarko | 5,237 | 5,545 | 7.6 | 3.2 |
| Ardmore | 19,701 | 20,090 | 6.6 | -4.8 |
| Bartlesville | 20,638 | 20,338 | 4.6 | -2.2 |
| Blackwell | 3,649 | 3,644 | 18.1 | -4.9 |
| Broken Arrow | 21,345 | 20,928 | 12.1 | -0.5 |
| Chickasha | 10,217 | 9,988 | 8.4 | -1.8 |
| Clinton | 7,586 | 7,408 | 13.0 | -0.9 |
| Cushing | 5,853 | 5,586 | 5.4 | 2.1 |
| Del City | 11,449 | 11,328 | -1.9 | -4.4 |
| Duncan | 16,916 | 16,273 | 20.3 | -7.6 |
| Durant | 10,976 | 11,332 | 6.3 | -3.1 |
| Edmond | 26,828 | 27,875 | 16.3 | -1.0 |
| Elk City | 8,398 | 8,545 | 10.9 | -2.4 |
| El Reno | 9,077 | 9,005 | 9.1 | 0.2 |
| Guthrie | 5,793 | 6,055 | 8.3 | 3.2 |
| Guymon | 4,841 | 4,988 | 4.5 | 1.8 |
| Henryetta | 5,109 | 5,326 | 9.1 | -1.7 |
| Hobart | 2,482 | 2,433 | 5.6 | -10.9 |
| Holdenville | 3,078 | 2,881 | 5.7 | 0.5 |
| Hugo | 2,937 | 2,915 | 6.8 | -1.9 |
| Idabel | 4,087 | 4,205 | 3.0 | -5.6 |
| Lawton | 49,125 | 49,798 | 5.2 | -3.8 |
| McAlester | 10,219 | 10,368 | 8.1 | -4.1 |
| Miami | 11,808 | 11,331 | 5.1 | -1.3 |
| Midwest City | 36,836 | 36,415 | 7.5 | -0.8 |
| Moore | 13,197 | 13,293 | 2.2 | -0.2 |
| Muskogee | 29,871 | 29,737 | 4.8 | -4.6 |
| Norman | 70,316 | 70,151 | 11.7 | -1.4 |
| Oklahoma City | 303,204 | 295,467 | 5.7 | 0.6 |
| Okmulgee | 5,427 | 5,516 | 3.6 | -2.0 |
| Pauls Valley | 4,582 | 4,747 | 15.5 | -2.2 |
| Pawhuska | 1,697 | 1,891 | 5.9 | -15.4 |
| Ponca City | 17,046 | 17,116 | 11.0 | -3.7 |
| Poteau | 5,043 | 4,777 | 10.2 | -3.1 |
| Sand Springs | 9,341 | 9,326 | 5.6 | 3.2 |
| Sapulpa | 13,662 | 13,661 | 6.7 | -1.5 |
| Seminole | 6,319 | 6,240 | 5.3 | 0.4 |
| Shawnee | 25,483 | 25,544 | 13.0 | -0.3 |
| Stillwater | 24,693 | 28,016 | 8.1 | -0.4 |
| Tahlequah | 7,463 | 7,760 | 1.3 | -3.8 |
| Tulsa | 261,363 | 258,663 | 7.6 | -0.1 |
| Watonga | 1,896 | 2,043 | 1.3 | 5.3 |
| Weatherford | 5,881 | 5,996 | 8.8 | -4.8 |
| Wewoka | 1,231 | 1,199 | 1.2 | -2.1 |
| Woodward | 12,384 | 12,439 | 9.3 | 0.0 |
| **Total** | 1,166,821 | 1,160,411 | 7.4 | -1.0 |

## RETAIL TRADE IN METRO AREAS AND STATE
($000)

| | 8 Mos. '88 | 8 Mos. '87 | Aug. '88 | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | | | | | 8 Mos. '88/'87 | Aug./July '88 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| **OKLAHOMA CITY MSA** | | | | | | | |
| Food | 1,525,020 | 1,482,190 | 205,118 | 219,019 | 2.9 | 5.1 | 13.0 |
| Apparel | 115,564 | 121,534 | 14,247 | 13,508 | -4.9 | 0.1 | 8.9 |
| General Merchandise | 500,485 | 466,979 | 64,252 | 64,129 | 7.2 | 1.0 | 12.5 |
| Furniture | 158,077 | 167,557 | 21,580 | 22,373 | -5.7 | -0.2 | 4.4 |
| Lumber | 117,712 | 112,017 | 15,000 | 16,677 | 5.1 | 5.3 | 2.0 |
| Auto Dealers | 1,283,920 | 1,063,678 | 193,031 | 172,194 | 20.7 | -5.1 | -17.3 |
| Service Stations | 135,668 | 136,851 | 15,605 | 17,374 | -0.9 | -11.7 | -8.0 |
| All Other | 506,093 | 482,223 | 65,985 | 59,782 | 4.9 | 6.5 | -2.8 |
| Total | 4,342,539 | 4,033,029 | 594,818 | 585,056 | 7.7 | 0.5 | -0.7 |
| **TULSA MSA** | | | | | | | |
| Food | 895,512 | 879,529 | 120,407 | 124,654 | 1.8 | 2.5 | 5.2 |
| Apparel | 105,881 | 111,970 | 12,142 | 12,614 | -5.4 | -0.5 | 23.0 |
| General Merchandise | 434,030 | 383,594 | 53,719 | 53,628 | 13.1 | -0.3 | 6.9 |
| Furniture | 103,480 | 92,687 | 15,434 | 13,746 | 11.6 | 44.2 | 28.3 |
| Lumber | 87,678 | 92,616 | 11,832 | 12,488 | -5.3 | 18.9 | 7.6 |
| Auto Dealers | 747,037 | 618,896 | 112,313 | 100,190 | 20.7 | -5.1 | -17.3 |
| Service Stations | 111,462 | 112,424 | 12,821 | 14,274 | -0.9 | -11.7 | -8.0 |
| All Other | 96,144 | 107,466 | 12,275 | 11,776 | -10.5 | 43.4 | 24.5 |
| Total | 2,581,224 | 2,399,182 | 350,943 | 343,370 | 7.6 | 1.5 | -1.1 |
| **ENID MSA** | | | | | | | |
| Food | 73,251 | 74,814 | 9,063 | 9,578 | -2.1 | -5.0 | -4.4 |
| Apparel | 10,702 | 12,143 | 1,245 | 1,137 | -11.9 | -10.0 | -23.1 |
| General Merchandise | 33,683 | 32,078 | 4,308 | 4,180 | 5.0 | 3.5 | 5.5 |
| Furniture | 8,482 | 8,114 | 1,092 | 1,052 | 4.5 | 14.3 | 10.5 |
| Lumber | 10,677 | 10,638 | 1,579 | 1,664 | 0.4 | 21.8 | 14.1 |
| Auto Dealers | 73,484 | 60,878 | 11,048 | 9,855 | 20.7 | -5.1 | -17.3 |
| Service Stations | 9,998 | 10,089 | 1,150 | 1,280 | -0.9 | -11.7 | -8.0 |
| All Other | 23,535 | 23,442 | 3,552 | 3,209 | 0.4 | 23.9 | 8.7 |
| Total | 243,812 | 232,196 | 33,037 | 31,955 | 5.0 | -0.3 | -6.4 |
| **LAWTON MSA** | | | | | | | |
| Food | 126,380 | 126,838 | 16,357 | 17,488 | -0.4 | -3.7 | 2.4 |
| Apparel | 14,271 | 14,721 | 1,640 | 1,603 | -3.1 | -11.3 | -7.9 |
| General Merchandise | 98,695 | 91,611 | 12,670 | 12,095 | 7.7 | 2.2 | 4.7 |
| Furniture | 18,865 | 17,434 | 2,630 | 2,582 | 8.2 | 15.1 | -4.5 |
| Lumber | 11,785 | 13,027 | 1,411 | 1,570 | -9.5 | 0.4 | -2.6 |
| Auto Dealers | 97,925 | 81,132 | 14,722 | 13,133 | 20.7 | -5.1 | -17.3 |
| Service Stations | 6,827 | 6,887 | 785 | 874 | -0.9 | -11.8 | -8.0 |
| All Other | 24,970 | 28,258 | 3,096 | 2,924 | -11.6 | 8.7 | -5.3 |
| Total | 399,718 | 379,908 | 53,311 | 52,269 | 5.2 | -1.6 | -4.3 |
| **MUSKOGEE AREA** | | | | | | | |
| Food | 84,712 | 89,980 | 10,709 | 11,816 | -5.9 | 0.9 | 0.1 |
| Apparel | 13,780 | 12,840 | 1,755 | 1,727 | 7.3 | -0.5 | 0.5 |
| General Merchandise | 31,428 | 26,802 | 3,964 | 3,763 | 17.3 | -0.8 | -1.2 |
| Furniture | 7,742 | 8,573 | 871 | 907 | -9.7 | -11.0 | -9.4 |
| Lumber | 2,868 | 3,561 | 328 | 362 | -19.5 | 4.1 | -6.2 |
| Auto Dealers | 61,768 | 51,182 | 9,284 | 8,283 | 20.7 | -5.1 | -17.3 |
| Service Stations | 8,738 | 8,832 | 1,005 | 1,119 | -1.1 | -11.7 | -8.0 |
| All Other | 23,336 | 24,181 | 2,895 | 2,653 | -3.5 | 10.5 | -0.2 |
| Total | 234,372 | 225,951 | 30,811 | 30,630 | 3.7 | -1.2 | -6.0 |
| **STATE**[a] | | | | | | | |
| **Durable Goods** | 4,434,627 | 3,847,452 | 635,355 | 593,833 | 15.3 | -3.6 | -12.6 |
| Auto Dealers | 3,207,843 | 2,657,825 | 482,290 | 430,225 | 20.7 | -5.1 | -17.3 |
| Accessory Dealers | 220,303 | 217,226 | 28,551 | 30,560 | 1.4 | 7.9 | 5.6 |
| Total Automotive | 3,428,146 | 2,875,051 | 510,841 | 460,785 | 19.2 | -4.4 | -16.0 |
| Furniture | 227,031 | 214,611 | 29,310 | 30,267 | 5.8 | 7.7 | 10.8 |
| Household Appliances | 156,694 | 149,318 | 19,005 | 19,415 | 4.9 | -0.9 | 0.0 |
| Total Furniture and Appliances | 383,725 | 363,929 | 48,315 | 49,682 | 5.4 | 4.1 | 6.3 |
| Lumber and Building Materials | 368,511 | 370,793 | 48,314 | 52,494 | -0.6 | 7.2 | 3.8 |
| Hardware Stores | 44,320 | 41,715 | 5,383 | 5,348 | 6.2 | 0.8 | -2.7 |
| Total Lumber, Building Materials & Hardware | 412,831 | 412,508 | 53,697 | 57,842 | 0.1 | 6.5 | 3.2 |
| **Nondurable Goods** | 7,083,892 | 7,295,817 | 894,706 | 951,332 | -2.9 | -1.3 | 5.7 |
| Apparel | 398,332 | 416,681 | 47,918 | 47,527 | -4.4 | 1.4 | 10.0 |
| Drug Stores | 328,952 | 361,156 | 42,656 | 40,890 | -8.9 | 10.5 | 12.0 |
| Eating and Drinking Places | 1,248,528 | 1,263,176 | 154,886 | 165,044 | -1.2 | -4.9 | -2.6 |
| Food Group | 2,881,235 | 3,050,225 | 380,332 | 413,183 | -5.5 | 0.8 | 9.8 |
| Service Stations | 445,469 | 449,375 | 51,243 | 57,051 | -0.9 | -11.7 | -8.0 |
| General Merchandise Group | 1,311,659 | 1,261,276 | 162,237 | 165,733 | 4.0 | -2.4 | 9.0 |
| **Total Retail Trade** | 11,518,519 | 11,143,269 | 1,530,061 | 1,545,165 | 3.4 | -2.2 | -2.2 |

[a] Total includes data for categories not shown in the table.

## ENID AND LAWTON MSAs
## MUSKOGEE MA

| Category | 8 Mos. '88 | 8 Mos. '87 | Aug. '88 | Percentage Change | |
|---|---|---|---|---|---|
| | | | | 8 Mos. '88/'87 | Aug./July '88 |
| **ENID MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 29,644 | 30,575 | 29,025 | -3.0 | -1.4 |
| Total Employment | 28,009 | 28,212 | 27,525 | -0.7 | -1.6 |
| Unemployment Rate (%) | 5.5 | 7.5 | 5.2 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 450 | 998 | 0 | -54.9 | — |
| Number of Units | 5 | 11 | 0 | -54.5 | — |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Number of Units | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 768 | 433 | 302 | 77.5 | 132.4 |
| Industrial ($000) | 0 | 1,194 | 0 | — | 0.0 |
| Institutional ($000) | 300 | 0 | 0 | — | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 2,692 | 660 | 995 | 308.1 | — |
| All Other Nonbuilding ($000) | 152 | 278 | 15 | -45.3 | -8.5 |
| Total Construction ($000) | 4,363 | 3,563 | 1,312 | 22.5 | 443.6 |
| **LAWTON MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 49,669 | 49,853 | 48,750 | -0.4 | -2.6 |
| Total Employment | 46,956 | 47,341 | 46,050 | -0.8 | -2.6 |
| Unemployment Rate (%) | 5.5 | 7.5 | 5.2 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 9,659 | 13,786 | 1,119 | -29.9 | 97.7 |
| Number of Units | 126 | 214 | 15 | -41.1 | 114.3 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 180 | 400 | 0 | -55.0 | 0.0 |
| Number of Units | 6 | 16 | 0 | -62.5 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 3,032 | 2,766 | 50 | 9.6 | -79.9 |
| Industrial ($000) | 830 | 20 | 0 | E | 0.0 |
| Institutional ($000) | 1,390 | 0 | 0 | — | — |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 1,997 | 712 | 0 | 180.4 | — |
| All Other Nonbuilding ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Total Construction ($000) | 17,088 | 17,684 | 1,169 | -3.4 | 10.9 |
| **MUSKOGEE MA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 31,616 | 32,694 | 30,825 | -3.3 | -0.8 |
| Total Employment | 28,731 | 30,028 | 27,925 | -4.3 | -1.0 |
| Unemployment Rate (%) | 9.2 | 8.9 | 9.4 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 216 | 885 | 0 | -75.6 | 0.0 |
| Number of Units | 2 | 9 | 0 | -77.8 | 0.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 75 | 0 | — | 0.0 |
| Number of Units | 0 | 2 | 0 | — | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 400 | 6,645 | 0 | -94.0 | 0.0 |
| Industrial ($000) | 0 | 20 | 0 | — | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 3,160 | 601 | 0 | 425.8 | — |
| All Other Nonbuilding ($000) | 5 | 0 | 0 | — | 0.0 |
| Total Construction ($000) | 3,781 | 8,226 | 0 | -54.6 | — |

Note: Includes revisions.

E = Exceeds 600 percent.

Sources for all tables: Local utilities companies; 10th Federal Reserve District Member Banks; Federal Home Loan Bank of Topeka; Oklahoma Employment Security Commission; United States Department of Commerce, Construction Statistics Division; Oklahoma Department of Transportation, *Progressive Report of the Transportation Director;* Center for Economic and Management Research, College of Business Administration, The University of Oklahoma. The data for all tables were compiled by Marjorie E. Earley, Statistician for CEMR and Brian M. Hickey, Data Analyst.

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**Center for Economic and Management Research**
**University of Oklahoma**
**Norman, Oklahoma 73069**

## OKLAHOMA CITY AND TULSA MSAs

| Category | 8 Mos. '88 | 8 Mos. '87 | Aug. '88 | Percentage Change | |
|---|---|---|---|---|---|
| | | | | 8 Mos.'88/'87 | Aug./July '88 |
| **OKLAHOMA CITY MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 498,050 | 510,788 | 490,900 | -2.5 | -2.2 |
| Total Employment | 470,912 | 478,388 | 464,400 | -1.6 | -2.3 |
| Unemployment Rate (%) | 5.5 | 6.4 | 5.4 | — | — |
| **Mortgage Loans Closed ($000,000)**[a] | 69.0 | 148.0 | 10.6 | -53.4 | -1.9 |
| **Bank Deposits ($000,000)**[b] | | | | | |
| Demand Deposits | 820 | 911 | 860 | -10.0 | 0.4 |
| Time and Savings Deposits | 1,133 | 1,751 | 1,165 | -35.3 | -1.6 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 78,583 | 91,635 | 11,880 | -14.2 | 90.8 |
| Number of Units | 1,106 | 1,474 | 161 | -25.0 | 69.5 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 1,374 | 915 | 80 | 50.2 | — |
| Number of Units | 75 | 44 | 5 | 70.5 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 41,657 | 68,794 | 3,741 | -39.4 | -42.7 |
| Industrial ($000) | 5,285 | 2,458 | 1,257 | 115.0 | 528.5 |
| Institutional ($000) | 9,651 | 10,410 | 750 | -7.3 | 143.5 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 51,957 | 42,388 | 6,786 | 22.6 | 19.4 |
| All Other Nonbuilding ($000) | 1,421 | 2,945 | 57 | -51.8 | -58.3 |
| Total Construction ($000) | 189,928 | 219,545 | 24,550 | -13.5 | 28.6 |
| **General Business Index** | 91.9 | 88.5 | 94.3 | 3.9 | 1.9 |
| **TULSA MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 340,338 | 350,950 | 338,600 | -3.0 | -1.8 |
| Total Employment | 315,550 | 320,188 | 315,200 | -1.4 | -2.1 |
| Unemployment Rate (%) | 7.3 | 8.8 | 6.9 | — | — |
| **Mortgage Loans Closed ($000,000)**[a] | 137.8 | 181.7 | 24.1 | -24.2 | -20.7 |
| **Bank Deposits ($000,000)**[b] | | | | | |
| Demand Deposits | 904 | 850 | 911 | 6.4 | 2.3 |
| Time and Savings Deposits | 2,165 | 2,327 | 2,215 | -7.0 | 3.8 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 74,094 | 86,686 | 9,124 | -14.5 | 4.3 |
| Number of Units | 963 | 1,251 | 124 | -23.0 | 12.7 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 1,298 | 11,095 | 0 | -88.3 | 0.0 |
| Number of Units | 56 | 516 | 0 | -89.1 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 45,050 | 14,511 | 844 | 210.5 | -93.0 |
| Industrial ($000) | 13,134 | 5,403 | 583 | 143.1 | -49.1 |
| Institutional ($000) | 8,450 | 10,299 | 0 | -18.0 | — |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 30,200 | 22,023 | 5,923 | 37.1 | 54.2 |
| All Other Nonbuilding ($000) | 2,935 | 3,478 | 340 | -15.6 | 0.0 |
| Total Construction ($000) | 175,162 | 153,493 | 16,814 | 14.1 | -37.3 |
| **General Business Index** | 88.0 | 87.3 | 90.9 | 0.9 | 0.8 |

Note: Includes revisions.

[a] By Savings and Loan Associations, 7 months and July data.

[b] Total deposits in large commercial banks (accounted for 36 percent of all commercial bank deposits as of December 31, 1987 for Oklahoma City and 50 percent of all commercial bank deposits as of December 31, 1987 for Tulsa).

## CONSTRUCTION, STATE

| Category | 8 Mos. '88 | 8 Mos. '87 | Aug. '88 | Percentage Change | |
|---|---|---|---|---|---|
| | | | | 8 Mos. '88/'87 | Aug./July '88 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 175,622 | 209,085 | 23,761 | -16.0 | 43.6 |
| Number of Units | 2,385 | 3,146 | 326 | -24.2 | 43.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 3,913 | 14,832 | 160 | -73.6 | — |
| Number of Units | 221 | 661 | 7 | -66.6 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 101,089 | 103,742 | 7,355 | -2.6 | -64.6 |
| Industrial ($000) | 23,790 | 9,505 | 1,840 | 150.3 | 9.6 |
| Institutional ($000) | 25,097 | 26,597 | 1,959 | -5.6 | 62.7 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 213,776 | 171,454 | 29,896 | 24.7 | -11.8 |
| All Other Nonbuilding ($000) | 4,739 | 7,004 | 436 | -32.3 | -15.6 |
| Total Construction ($000) | 548,026 | 542,219 | 65,406 | 1.1 | -12.3 |

Note: Includes revisions.

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# OKLAHOMA BUSINESS BULLETIN

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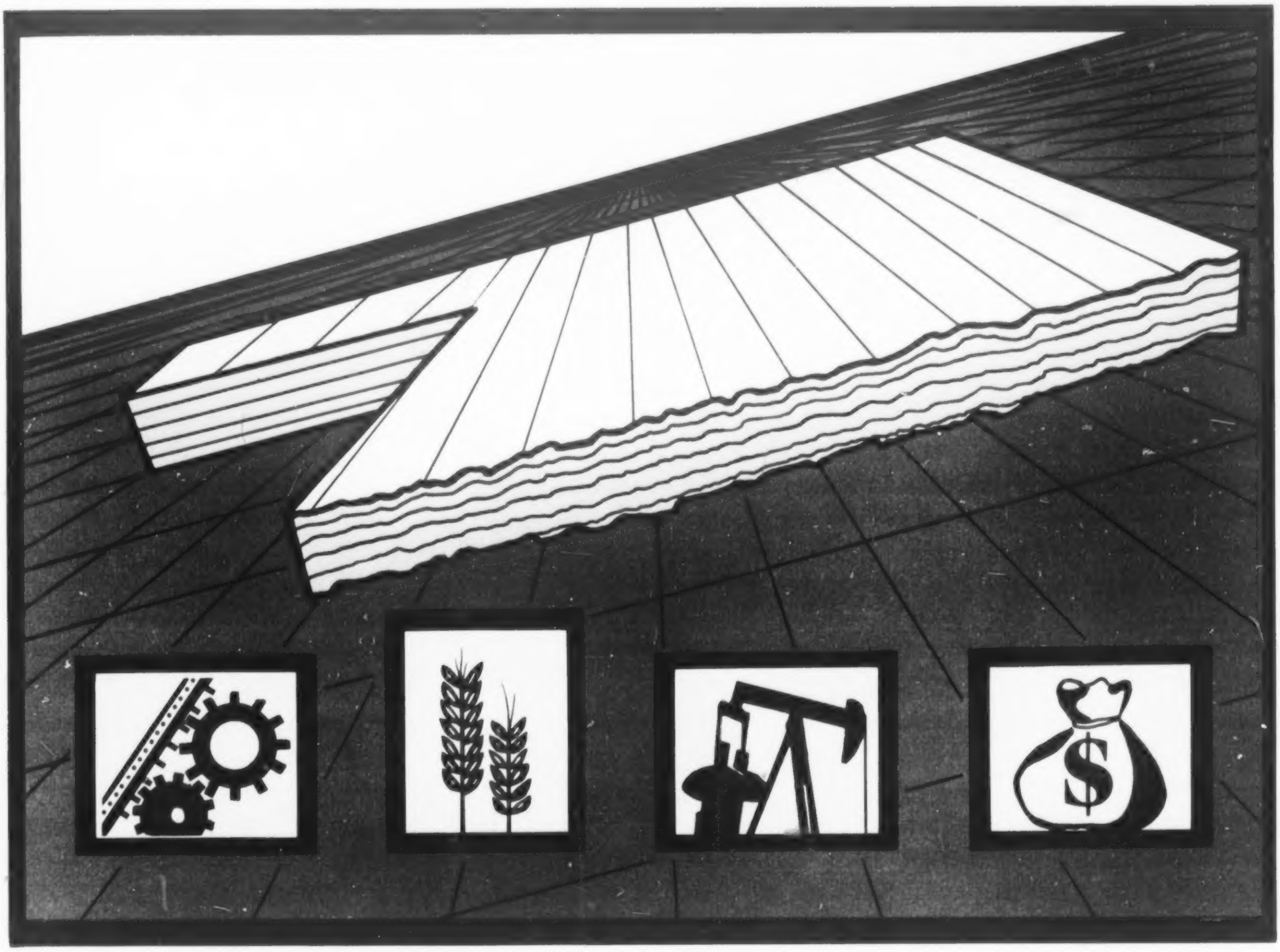

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## SUMMARY OF INDICATORS

| Category | 9 Mos. '88 | 9 Mos. '87 | Sept. '88 | Percentage Change | |
|---|---|---|---|---|---|
| | | | | 9 Mos. '88/'87 | Sept./Aug. '88 |
| **Personal Income (Monthly Average)** | | | | | |
| Unadjusted ($000,000) | 3,630 | 3,392 | 3,710 | 7.1 | 0.5 |
| Adjusted for CPI ($000,000) | 3,087 | 3,002 | 3,097 | 2.8 | -3.2 |
| **Crude Oil Production (000 bbl)** | 80,522[a] | 82,702[a] | 9,880[a] | -2.6[a] | 1.2[a] |
| Natural Gas Production (000 mcf) | 1,332,960[a] | 1,342,081[a] | 134,862[a] | -0.7[a] | -18.3[a] |
| **Industrial Power Sales (000,000 Kwh)**[b] | 6,413 | 6,140 | 348 | 4.4 | 1.6 |
| **Total Bank Deposits (Monthly Average) ($000,000)**[c] | | | | | |
| Demand | 7,571 | 7,520 | 7,440 | 0.7 | -1.6 |
| Savings | 24,469 | 25,550 | 24,188 | -4.2 | -0.3 |
| **Savings and Loan Associations ($000,000)** | | | | | |
| Assets | 10,439 | 9,835 | 10,688 | 6.1 | -1.3 |
| Mortgage Loans Closed | 504 | 742 | 60 | -32.1 | -19.9 |
| **General Business Index** | 94.7 | 93.7 | 95.2 | 1.0 | -0.1 |

Note: Includes revisions.

[a] 8 months and August data. Natural gas includes casinghead gas.

[b] Sales of larger privately owned utility companies.

[c] Total deposits of all depository institutions.

## SELECTED ECONOMIC INDICATORS

| Category | 9 Mos. '88 | 9 Mos. '87 | Sept. '88 | Percentage Change | |
|---|---|---|---|---|---|
| | | | | 9 Mos. '88/'87 | Sept./Aug. '88 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 196,017 | 235,746 | 19,893 | -16.9 | -17.8 |
| Number of Units | 2,653 | 3,533 | 257 | -24.9 | -23.1 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 5,651 | 14,832 | 1,738 | -61.9 | E |
| Number of Units | 277 | 661 | 56 | -58.1 | E |
| Nonresidential | | | | | |
| Commercial ($000) | 109,361 | 118,747 | 7,990 | -7.9 | 4.6 |
| Industrial ($000) | 25,817 | 13,451 | 2,027 | 91.9 | 10.2 |
| Institutional ($000) | 31,041 | 29,537 | 5,918 | 5.1 | 200.3 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 234,490 | 200,015 | 20,714 | 17.2 | -30.7 |
| All Other Nonbuilding ($000) | 4,975 | 7,347 | 214 | -32.3 | -53.3 |
| Total Construction ($000) | 607,353 | 619,674 | 58,493 | -2.0 | -11.6 |
| **EMPLOYMENT TRENDS** | | | | | |
| Total Labor Force (000)[a] | 1,519.2 | 1,566.1 | 1,494.9 | -3.0 | 0.3 |
| Total Employment (000) | 1,419.6 | 1,448.4 | 1,403.8 | -2.0 | 0.2 |
| Manufacturing (000) | 156.4 | 154.1 | 158.5 | 1.5 | -0.1 |
| Mining (000) | 43.7 | 45.6 | 43.1 | -4.2 | -1.4 |
| Government (000) | 246.9 | 247.0 | 247.3 | 0.0 | 5.6 |
| Contract Construction (000) | 32.1 | 34.0 | 32.1 | -5.6 | -7.8 |
| Services (000) | 235.7 | 231.3 | 240.9 | 1.9 | 0.4 |
| Retail Trade (000)[b] | 205.3 | 209.6 | 209.0 | -2.1 | -0.1 |
| Unemployment Rate (%) | 6.6 | 7.7 | 6.1 | — | — |
| **Average Weekly Hours** | | | | | |
| Manufacturing (Per Worker) | 40.9 | 41.1 | 41.0 | -0.5 | 0.7 |
| **Average Weekly Earnings** | | | | | |
| Manufacturing ($ Per Worker) | 421.99 | 415.02 | 428.45 | 1.7 | 1.3 |
| Contract Construction ($ Per Worker) | 428.67 | 428.05 | 429.46 | 0.1 | -2.0 |
| Retail Trade ($ Per Worker)[b] | 191.12 | 193.24 | 192.51 | -1.1 | -0.6 |

Note: Includes revisions in some previous months.

[a] Civilian Labor Force.

[b] Excluding eating and drinking places.

E = exceeds 600 percent.

## RETAIL TRADE IN METRO AREAS AND STATE
($000)

| | 9 Mos. '88 | 9 Mos. '87 | Sept. '88 | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | | | | | 9 Mos. '88/'87 | Sept./Aug. '88 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| **OKLAHOMA CITY MSA** | | | | | | | |
| Food | 1,726,526 | 1,675,602 | 202,324 | 198,804 | 3.0 | -1.1 | -9.2 |
| Apparel | 129,978 | 136,461 | 14,264 | 14,033 | -4.8 | 0.1 | 3.9 |
| General Merchandise | 566,267 | 527,761 | 65,839 | 57,716 | 7.3 | 2.3 | -10.0 |
| Furniture | 182,580 | 187,935 | 23,930 | 24,214 | -2.8 | 9.8 | 8.2 |
| Lumber | 132,903 | 126,758 | 15,046 | 15,828 | 4.8 | 0.6 | -5.1 |
| Auto Dealers | 1,462,872 | 1,184,383 | 186,495 | 172,560 | 23.5 | -1.6 | 0.2 |
| Service Stations | 153,466 | 153,876 | 17,581 | 18,882 | -0.3 | 13.3 | 8.7 |
| All Other | 570,436 | 546,945 | 62,844 | 57,802 | 4.3 | -4.3 | -3.3 |
| Total | 4,925,028 | 4,539,721 | 588,323 | 559,839 | 8.5 | -0.4 | -4.3 |
| **TULSA MSA** | | | | | | | |
| Food | 1,013,560 | 991,304 | 118,401 | 114,108 | 2.2 | -1.1 | -8.5 |
| Apparel | 118,530 | 126,622 | 12,544 | 11,967 | -6.4 | 2.5 | -5.1 |
| General Merchandise | 490,403 | 434,897 | 56,028 | 51,124 | 12.8 | 3.7 | -4.7 |
| Furniture | 116,528 | 104,619 | 13,024 | 12,773 | 11.4 | -15.4 | -7.1 |
| Lumber | 100,466 | 104,467 | 12,588 | 12,919 | -3.8 | 5.6 | 3.5 |
| Auto Dealers | 851,159 | 689,127 | 108,511 | 100,403 | 23.5 | -1.6 | 0.2 |
| Service Stations | 126,084 | 126,411 | 14,444 | 15,513 | -0.3 | 13.3 | 8.7 |
| All Other | 106,266 | 119,073 | 10,909 | 11,754 | -10.8 | -14.1 | -0.2 |
| Total | 2,922,996 | 2,696,520 | 346,449 | 330,561 | 8.4 | -0.7 | -3.7 |
| **ENID MSA** | | | | | | | |
| Food | 83,831 | 84,468 | 10,306 | 9,752 | -0.8 | 7.6 | 1.8 |
| Apparel | 12,203 | 13,657 | 1,476 | 1,318 | -10.6 | 18.4 | 15.9 |
| General Merchandise | 37,939 | 36,233 | 4,269 | 3,644 | 4.7 | -0.7 | -12.8 |
| Furniture | 9,447 | 9,006 | 990 | 965 | 4.9 | -8.3 | -8.3 |
| Lumber | 11,865 | 11,976 | 1,218 | 1,251 | -0.9 | -22.7 | -24.8 |
| Auto Dealers | 83,726 | 67,786 | 10,673 | 9,876 | 23.5 | -1.6 | 0.2 |
| Service Stations | 11,310 | 11,344 | 1,295 | 1,391 | -0.3 | 13.3 | 8.7 |
| All Other | 26,094 | 26,343 | 2,756 | 2,614 | -0.9 | -8.8 | -18.5 |
| Total | 276,415 | 260,813 | 32,983 | 30,811 | 6.0 | 0.6 | -3.6 |
| **LAWTON MSA** | | | | | | | |
| Food | 142,329 | 142,440 | 16,101 | 15,106 | -0.1 | -1.4 | -13.6 |
| Apparel | 16,253 | 16,459 | 1,939 | 1,890 | -1.3 | 20.2 | 17.9 |
| General Merchandise | 111,299 | 103,969 | 12,724 | 10,483 | 7.1 | 0.6 | -13.3 |
| Furniture | 21,290 | 19,896 | 2,362 | 2,184 | 7.0 | -10.9 | -15.4 |
| Lumber | 13,122 | 14,737 | 1,340 | 1,351 | -11.0 | -4.6 | -13.9 |
| Auto Dealers | 111,574 | 90,338 | 14,224 | 13,161 | 23.5 | -1.6 | 0.2 |
| Service Stations | 7,722 | 7,744 | 884 | 950 | -0.3 | 13.3 | 8.7 |
| All Other | 27,914 | 31,944 | 3,052 | 3,200 | -12.6 | -2.3 | 9.4 |
| Total | 451,503 | 427,527 | 52,626 | 48,325 | 5.6 | -0.7 | -7.5 |
| **MUSKOGEE AREA** | | | | | | | |
| Food | 96,595 | 101,049 | 11,691 | 11,655 | -4.4 | 7.9 | -1.4 |
| Apparel | 16,003 | 14,584 | 2,189 | 2,121 | 9.7 | 23.5 | 22.8 |
| General Merchandise | 35,180 | 30,969 | 3,799 | 3,397 | 13.6 | -3.8 | -9.7 |
| Furniture | 8,904 | 9,624 | 1,066 | 1,098 | -7.5 | 19.0 | 21.1 |
| Lumber | 3,274 | 3,967 | 399 | 440 | -17.5 | 18.8 | 21.5 |
| Auto Dealers | 70,372 | 56,985 | 8,970 | 8,301 | 23.5 | -1.6 | 0.2 |
| Service Stations | 9,885 | 9,929 | 1,133 | 1,216 | -0.4 | 13.8 | 8.7 |
| All Other | 25,825 | 27,452 | 2,579 | 2,313 | -5.9 | -9.3 | -12.8 |
| Total | 266,038 | 254,559 | 31,826 | 30,541 | 4.5 | 3.5 | -0.3 |
| **STATE**[a] | | | | | | | |
| **Durable Goods** | 5,041,627 | 4,308,288 | 618,001 | 585,076 | 17.0 | -1.4 | -1.5 |
| Auto Dealers | 3,654,956 | 2,959,399 | 465,961 | 431,140 | 23.5 | -1.6 | 0.2 |
| Accessory Dealers | 248,420 | 247,093 | 28,226 | 27,409 | 0.5 | -0.8 | -10.3 |
| Total Automotive | 3,903,376 | 3,206,492 | 494,187 | 458,549 | 21.7 | -1.6 | -0.5 |
| Furniture | 257,065 | 241,204 | 29,757 | 29,459 | 6.6 | 0.9 | -2.7 |
| Household Appliances | 174,783 | 170,222 | 18,251 | 17,934 | 2.7 | -3.7 | -7.6 |
| Total Furniture and Appliances | 431,848 | 411,426 | 48,008 | 47,393 | 5.0 | -0.9 | -4.6 |
| Lumber and Building Materials | 415,327 | 418,915 | 46,474 | 49,166 | -0.9 | -3.2 | -6.3 |
| Hardware Stores | 49,536 | 47,240 | 5,253 | 4,968 | 4.9 | -2.1 | -7.1 |
| Total Lumber, Building Materials & Hardware | 464,863 | 466,155 | 51,727 | 54,134 | -0.3 | -3.1 | -6.4 |
| **Nondurable Goods** | 8,000,711 | 8,186,590 | 914,644 | 878,024 | -2.3 | 2.0 | -7.7 |
| Apparel | 448,426 | 469,007 | 49,588 | 47,983 | -4.4 | 3.0 | 1.0 |
| Drug Stores | 372,347 | 407,257 | 43,035 | 39,864 | -8.6 | 0.9 | -2.5 |
| Eating and Drinking Places | 1,408,732 | 1,416,912 | 160,681 | 157,221 | -0.6 | 3.3 | -4.7 |
| Food Group | 3,259,447 | 3,415,898 | 379,120 | 364,634 | -4.6 | -0.1 | -11.7 |
| Service Stations | 503,913 | 505,277 | 57,733 | 62,003 | -0.3 | 13.3 | 8.7 |
| General Merchandise Group | 1,476,124 | 1,417,347 | 165,802 | 149,497 | 4.1 | 2.1 | -9.8 |
| **Total Retail Trade** | 13,042,338 | 12,494,878 | 1,532,645 | 1,463,100 | 4.4 | 0.6 | -5.3 |

[a] Total includes data for categories not shown in the table.

## RETAIL TRADE IN SELECTED CITIES
($000)

| | | | | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | 9 Mos. '88 | 9 Mos. '87 | Sept. '88 | | 9 Mos. '88/'87 | Sept./Aug. '88 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| Ada | 124,450 | 119,761 | 14,863 | 13,946 | 3.9 | -1.1 | -6.8 |
| Altus | 113,004 | 107,007 | 13,744 | 12,651 | 5.6 | 4.5 | -2.3 |
| Alva | 34,952 | 32,821 | 4,079 | 3,889 | 6.5 | -2.5 | -9.9 |
| Anadarko | 43,509 | 40,440 | 5,032 | 4,673 | 7.6 | -3.2 | -15.7 |
| Ardmore | 173,843 | 162,263 | 20,259 | 18,635 | 7.1 | 3.2 | -7.2 |
| Bartlesville | 176,092 | 166,289 | 20,771 | 19,466 | 5.9 | 1.5 | -4.3 |
| Blackwell | 31,227 | 26,295 | 3,475 | 3,314 | 18.8 | -3.2 | -9.1 |
| Broken Arrow | 175,918 | 155,321 | 21,148 | 20,142 | 13.3 | -0.3 | -3.8 |
| Chickasha | 85,428 | 78,042 | 10,288 | 9,892 | 9.5 | 0.9 | -1.0 |
| Clinton | 60,358 | 52,740 | 7,299 | 6,760 | 14.4 | -3.1 | -8.7 |
| Cushing | 49,227 | 46,466 | 5,765 | 5,482 | 5.9 | -1.1 | -1.9 |
| Del City | 98,104 | 98,458 | 11,807 | 11,282 | -0.4 | 3.3 | -0.4 |
| Duncan | 139,885 | 115,881 | 15,622 | 14,719 | 20.7 | -7.3 | -9.5 |
| Durant | 95,473 | 89,039 | 11,053 | 10,466 | 7.2 | 1.0 | -7.6 |
| Edmond | 223,242 | 189,819 | 26,684 | 25,549 | 17.6 | 0.3 | -8.3 |
| Elk City | 69,630 | 62,344 | 8,321 | 7,746 | 11.7 | -0.5 | -9.4 |
| El Reno | 71,884 | 65,019 | 8,855 | 8,474 | 10.6 | -1.9 | -5.9 |
| Guthrie | 47,503 | 43,479 | 5,620 | 5,270 | 9.3 | -2.2 | -13.0 |
| Guymon | 40,420 | 38,073 | 4,941 | 4,731 | 6.2 | 2.0 | -5.2 |
| Henryetta | 43,358 | 39,793 | 4,920 | 4,538 | 9.0 | -2.8 | -14.8 |
| Hobart | 21,238 | 19,929 | 2,514 | 2,324 | 6.6 | 1.9 | -4.5 |
| Holdenville | 24,991 | 23,354 | 3,004 | 2,780 | 7.0 | -1.5 | -3.5 |
| Hugo | 25,565 | 23,658 | 3,000 | 2,838 | 8.1 | 2.5 | -2.6 |
| Idabel | 33,980 | 32,586 | 4,024 | 3,717 | 4.3 | -0.1 | -11.6 |
| Lawton | 429,232 | 406,252 | 49,571 | 45,966 | 5.7 | 0.9 | -7.7 |
| McAlester | 91,289 | 83,890 | 10,555 | 9,891 | 8.8 | 3.6 | -4.6 |
| Miami | 101,764 | 96,604 | 11,957 | 11,276 | 5.3 | 1.6 | -0.5 |
| Midwest City | 315,241 | 294,452 | 36,247 | 33,542 | 7.1 | -1.0 | -7.9 |
| Moore | 120, 074 | 117,302 | 13,390 | 13,058 | 2.4 | 1.1 | -1.8 |
| Muskogee | 257,745 | 244,032 | 30,788 | 29,447 | 5.6 | 3.3 | -1.0 |
| Norman | 569,620 | 504,225 | 67,527 | 65,553 | 13.0 | -2.6 | -6.6 |
| Oklahoma City | 2,486,500 | 2,330,933 | 300,209 | 285,585 | 6.7 | -0.6 | -3.3 |
| Okmulgee | 47,322 | 45,413 | 5,539 | 5,290 | 4.2 | 2.3 | -4.1 |
| Pauls Valley | 38,152 | 33,191 | 4,355 | 4,175 | 14.9 | -3.7 | -12.0 |
| Pawhuska | 15,125 | 14,186 | 1,698 | 1,693 | 6.6 | 0.2 | -10.5 |
| Ponca City | 149,317 | 134,545 | 17,415 | 16,766 | 1.0 | 2.2 | -2.0 |
| Poteau | 42,751 | 37,504 | 5,347 | 5,000 | 14.0 | 5.5 | 4.7 |
| Sand Springs | 76,183 | 71,669 | 8,977 | 8,431 | 6.3 | -3.1 | -9.6 |
| Sapulpa | 115,304 | 106,863 | 13,812 | 12,899 | 7.9 | 1.5 | -5.6 |
| Seminole | 52,848 | 49,889 | 6,159 | 5,679 | 5.9 | -1.5 | -9.0 |
| Shawnee | 232,938 | 205,475 | 26,854 | 25,707 | 13.4 | 5.0 | 0.6 |
| Stillwater | 219,016 | 202,660 | 25,153 | 24,867 | 8.1 | 2.0 | -11.2 |
| Tahlequah | 67,243 | 66,336 | 7,591 | 7,429 | 1.4 | 1.6 | -4.3 |
| Tulsa | 2,213,367 | 2,043,421 | 261,110 | 251,605 | 8.3 | 0.1 | -2.7 |
| Watonga | 15,717 | 15,141 | 2,029 | 1,933 | 3.8 | 5.6 | -5.4 |
| Weatherford | 49,997 | 45,453 | 5,869 | 5,688 | 10.0 | 0.4 | -5.1 |
| Wewoka | 10,303 | 9,861 | 1,300 | 1,268 | 4.5 | 6.3 | 5.8 |
| Woodward | 103,242 | 93,960 | 12,016 | 11,089 | 9.9 | -2.5 | -10.9 |
| **Total Selected Cities** | 9,823,571 | 9,082,134 | 1,162,556 | 1,107,121 | 8.2 | 0.0 | -4.6 |

Sources for all tables: Local utilities companies; 10th Federal Reserve District Member Banks; Federal Home Loan Bank of Topeka; Oklahoma Employment Security Commission; United States Department of Commerce, Construction Statistics Division; Oklahoma Department of Transportation, *Progressive Report of the Transportation Director;* Center for Economic and Management Research, College of Business Administration, The University of Oklahoma. The data for all tables were compiled by Marjorie E. Earley, Statistician for CEMR and Brian Hickey, Research Assistant.

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## ENID AND LAWTON MSAs

| Category | 9 Mos. '88 | 9 Mos. '87 | Sept. '88 | Percentage Change<br>9 Mos. '88/'87 | Percentage Change<br>Sept./Aug. '88 |
|---|---|---|---|---|---|
| **ENID MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 29,522 | 30,494 | 28,550 | -3.2 | -1.6 |
| Total Employment | 27,917 | 28,206 | 27,175 | -1.0 | -1.3 |
| Unemployment Rate (%) | 5.5 | 7.3 | 5.0 | — | — |
| **Industrial Power Sales (000 Kwh)** | 348,015 | 342,574 | 32,930 | 1.6 | -12.1 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 570 | 1,273 | 120 | -55.2 | — |
| Number of Units | 6 | 14 | 1 | -57.1 | — |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Number of Units | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 804 | 452 | 36 | 77.9 | -88.1 |
| Industrial ($000) | 0 | 1,194 | 0 | — | 0.0 |
| Institutional ($000) | 300 | 0 | 0 | — | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 2,692 | 660 | 0 | 308.1 | — |
| All Other Nonbuilding ($000) | 152 | 307 | 0 | -50.5 | -98.2 |
| Total Construction ($000) | 4,519 | 3,887 | 156 | 16.3 | -88.1 |
| **LAWTON MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 49,489 | 49,756 | 48,050 | -0.5 | -1.4 |
| Total Employment | 46,789 | 47,264 | 45,450 | -1.0 | -1.3 |
| Unemployment Rate (%) | 5.5 | 5.0 | 5.4 | — | — |
| **Industrial Power Sales (000 Kwh)** | 149,580 | 147,066 | 19,819 | 1.7 | 18.8 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 10,435 | 14,606 | 776 | -28.6 | -30.7 |
| Number of Units | 135 | 228 | 9 | -40.8 | -40.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 180 | 400 | 0 | -55.0 | 0.0 |
| Number of Units | 6 | 16 | 0 | -62.5 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 3,522 | 2,813 | 490 | 25.2 | E |
| Industrial ($000) | 830 | 20 | 0 | E | 0.0 |
| Institutional ($000) | 1,390 | 1,400 | 0 | -0.7 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 7,962 | 712 | 5,965 | E | — |
| All Other Nonbuilding ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Total Construction ($000) | 24,318 | 19,951 | 7,231 | 21.9 | 518.3 |

Note: Includes revisions. [a]Civilian Labor Force. E = exceeds 600 percent.

## MUSKOGEE MA

| Category | 9 Mos. '88 | 9 Mos. '87 | Sept. '88 | Percentage Change<br>9 Mos. '88/'87 | Percentage Change<br>Sept./Aug. '88 |
|---|---|---|---|---|---|
| **Employment (Number)** | | | | | |
| Labor Force[a] | 31,586 | 32,678 | 31,350 | -3.3 | 1.7 |
| Total Employment | 28,700 | 30,019 | 28,450 | -4.4 | 1.9 |
| Unemployment Rate (%) | 9.2 | 8.8 | 9.3 | — | — |
| **Industrial Power Sales (000 Kwh)** | 130,316 | 147,716 | 15,048 | -11.8 | 17.2 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 216 | 885 | 0 | -75.6 | 0.0 |
| Number of Units | 2 | 9 | 0 | -77.8 | 0.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 75 | 0 | — | 0.0 |
| Number of Units | 0 | 2 | 0 | — | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 400 | 6,645 | 0 | -94.0 | 0.0 |
| Industrial ($000) | 0 | 20 | 0 | — | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 3,160 | 623 | 0 | 407.4 | 0.0 |
| All Other Nonbuilding ($000) | 5 | 0 | 0 | — | 0.0 |
| Total Construction ($000) | 3,781 | 8,248 | 0 | -54.2 | 0.0 |

**Note: Includes revisions.** [a]Civilian Labor Force.

## TULSA MSA

| | | | | Percentage Change | |
|---|---|---|---|---|---|
| Category | 9 Mos. '88 | 9 Mos. '87 | Sept. '88 | 9 Mos. '88/'87 | Sept./Aug. '88 |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 339,733 | 349,978 | 334,900 | -2.9 | -1.1 |
| Total Employment | 315,222 | 319,889 | 312,600 | -1.5 | -0.8 |
| Manufacturing | 47,889 | 47,100 | 48,800 | 1.7 | 0.8 |
| Mining | 14,956 | 15,244 | 14,900 | -1.9 | 0.0 |
| Government | 35,633 | 35,500 | 36,000 | 0.4 | 5.9 |
| Wholesale and Retail Trade | 69,322 | 69,922 | 69,200 | -0.9 | -0.4 |
| Unemployment Rate (%) | 7.2 | 8.6 | 6.7 | — | — |
| **Average Weekly Earnings** | | | | | |
| Manufacturing ($ Per Worker) | 444.57 | 435.44 | 450.60 | 2.1 | 3.1 |
| **Industrial Power Sales (000 Kwh)** | 1,684,270 | 1,570,369 | 208,093 | 7.2 | 1.4 |
| **Mortgage Loans Closed ($000,000)** | 165.4[b] | 197.9[b] | 27.6[b] | -16.4[b] | 14.5[b] |
| **Bank Deposits ($000,000)[c]** | | | | | |
| Demand Deposits | 903 | 852 | 897 | 6.1 | -1.6 |
| Time and Savings Deposits | 2,169 | 2,323 | 2,203 | -6.6 | -0.6 |
| **Air Transportation** | | | | | |
| Passengers Enplaning (Number) | 1,022,801 | 1,061,851 | 107,954 | -3.7 | -13.1 |
| Passengers Deplaning (Number) | 1,030,362 | 1,076,994 | 107,604 | -4.3 | -17.7 |
| Freight (Tons) | 16,457 | 11,701 | 2,090 | 40.6 | 1.2 |
| **Water Transportation** | | | | | |
| Tulsa Port of Catoosa | | | | | |
| Tons In | 356,646 | 399,396 | 31,667 | -10.7 | -9.5 |
| Tons Out | 835,967 | 929,940 | 98,472 | -10.1 | -1.0 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 83,169 | 96,677 | 8,686 | -14.0 | -8.2 |
| Number of Units | 1,085 | 1,394 | 114 | -22.2 | -11.6 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 1,378 | 11,095 | 80 | -87.6 | — |
| Number of Units | 58 | 516 | 2 | -88.8 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 45,966 | 16,743 | 670 | 174.5 | -38.5 |
| Industrial ($000) | 15,018 | 9,144 | 1,884 | 64.2 | 223.1 |
| Institutional ($000) | 10,690 | 10,944 | 2,228 | -2.3 | — |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 32,853 | 28,716 | 2,653 | 14.4 | -55.2 |
| All Other Nonbuilding ($000) | 3,109 | 3,586 | 151 | -13.3 | -58.3 |
| Total Construction | 192,183 | 176,906 | 16,352 | 8.6 | -6.2 |
| **General Business Index** | 88.3 | 87.1 | 90.1 | 1.3 | -0.9 |

Note: Includes revisions.

[a] Civilian Labor Force.

[b] By Savings and Loan Associations, 8 Months and August data.

[c] Deposits of large commercial banks (accounted for 50 percent of all commercial bank deposits as of December 31, 1987).

## OKLAHOMA CITY MSA

| Category | 9 Mos. '88 | 9 Mos. '87 | Sept. '88 | Percentage Change<br>9 Mos. '88/'87 | Percentage Change<br>Sept./Aug. '88 |
|---|---|---|---|---|---|
| **Employment (Number)**[a] | | | | | |
| Labor Force[a] | 497,178 | 510,089 | 490,200 | -2.5 | -0.1 |
| Total Employment | 470,256 | 478,311 | 465,000 | -1.7 | 0.1 |
| Manufacturing | 47,322 | 47,178 | 48,000 | 0.3 | 0.4 |
| Mining | 10,967 | 11,400 | 10,800 | -3.8 | 0.0 |
| Government | 95,166 | 95,833 | 96,100 | -0.7 | 4.0 |
| Wholesale and Retail Trade | 98,822 | 100,489 | 99,900 | -1.7 | 0.5 |
| Unemployment Rate (%) | 5.4 | 6.2 | 5.1 | — | — |
| **Average Weekly Earnings** | | | | | |
| Manufacturing ($ Per Worker) | 472.55 | 450.02 | 487.62 | 5.0 | 2.8 |
| **Industrial Power Sales (000 Kwh)** | 914,881 | 910,744 | 111,556 | 0.5 | -0.8 |
| **Mortgage Loans Closed ($000,000)** | 83.4[b] | 161.9[b] | 14.4[b] | -48.5[b] | 35.8[b] |
| **Bank Deposits ($000,000)**[c] | | | | | |
| Demand Deposits | 821 | 916 | 830 | -10.3 | -3.4 |
| Time and Savings Deposits | 1,136 | 1,707 | 1,162 | -33.4 | -0.3 |
| **Air Transportation** | | | | | |
| Passengers Enplaning (Number) | 1,119,094 | 1,144,848 | 124,202 | -2.2 | -12.7 |
| Passengers Deplaning (Number) | 1,130,387 | 1,157,704 | 121,196 | -2.4 | -19.1 |
| Freight Enplaned (Tons) | 5,935 | 4,461 | 602 | 33.0 | -56.1 |
| Freight Deplaned (Tons) | 8,244 | 7,293 | 924 | 13.0 | -38.5 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 87,368 | 104,427 | 8,785 | -16.3 | -26.0 |
| Number of Units | 1,217 | 1,662 | 111 | -26.8 | -31.1 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 1,374 | 915 | 0 | 50.3 | — |
| Number of Units | 75 | 44 | 0 | 70.5 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 47,979 | 77,991 | 6,323 | -38.5 | 69.0 |
| Industrial ($000) | 5,297 | 2,663 | 12 | 98.9 | -99.0 |
| Institutional ($000) | 13,240 | 11,305 | 3,590 | 17.1 | 378.6 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 52,893 | 43,818 | 935 | 20.7 | -86.2 |
| All Other Nonbuilding ($000) | 1,468 | 3,132 | 47 | -53.1 | -17.1 |
| Total Construction ($000) | 209,620 | 249,250 | 19,692 | -15.9 | -19.8 |
| **General Business Index** | 92.2 | 88.7 | 94.6 | 3.9 | 0.3 |

Note: Includes revisions.

[a] Civilian Labor Force.

[b] By Savings and Loan Associations. 8 months and August data.

[c] Deposits of large commercial banks (accounted for 36 percent of all commercial bank deposits as of December 31, 1987).

# *Business Highlights*

NEIL J. DIKEMAN, JR.

BUSINESS CONDITIONS in Oklahoma during the first three quarters of 1988 presented a mixed picture with some elements of the economy continuing to gain strength while others either remained flat or declined. The gains which occurred in retail sales, manufacturing and personal income, however, more than matched the losses experienced in the financial sector, mining and construction thus causing the Oklahoma General Business Index to show a slight gain. These changes as well as what they portend for 1989 are discussed in the paragraphs which follow.

## Retail Trade

After adjustment for seasonal variations, retail trade during the first three quarters of the year continued to exceed the volume of 1987 by slightly more than the rate of inflation despite a modest 0.6 percent increase in adjusted sales during September. The increases during the year raised the volume to nearly $13 billion which is 4.4 percent above the $12.5 billion registered for the same period last year. At the present rate of growth, and if retail sales follow expected seasonal patterns, the volume by year's end could reach $16.4 billion which will be an increase of 5.1 percent over the total for 1987 and thus would represent an increase in sales after adjustment for inflation of about 1 percent.

The gain thus far this year is attributable to the 17 percent rise in sales of durable goods which in turn was due primarily to a 21.7 percent increase in sales of automobiles and auto accessories. Other notable gains among durable goods lines were those of 6.6 percent in furniture sales, 4.9 percent in sales of hardware and 2.7 percent in appliance sales. These increases were tempered somewhat, however, by a decrease of 0.9 percent in lumber and building materials.

Sales of non-durable goods continue to remain well below year ago levels although the deficit from last year's volume was only 2.3 percent which is the lowest thus far this year and marks the seventh successive month that the margin between 1988 sales and those of 1987 has declined. Sales in all non-durable lines except general merchandise were below the volume for the same period last year with the decline of 8.6 percent in drug stores sales being the largest. As mentioned earlier, general merchandise line sales rose for the fourth consecutive month and as a result were 4.1 percent greater than for the same period last year.

Unfortunately, the increase in sales during the first nine months of 1988 is not general throughout all areas. The larger trade centers in the State were the major contributors to the overall gain as is noted by the fact that the four MSAs (i.e. Oklahoma City, Tulsa, Enid and Lawton) had an aggregate increase of $600 million which represents an 8.2 percent gain while Muskogee, the fifth large trade center, experienced a 4.5 percent rise for the period thus raising the total for the five centers 8.1 percent ahead of the same period last year. The large cities within these five major trade areas were significant contributors to the overall increase as sales in these cities increased 8.0 percent. However, sales in the smaller towns and communities which account for about 15 percent of the trade center sales were 8.4 percent above the 1987 level. Cities outside the major trade centers also contributed heavily to the overall increase as sales in these cities were 8.5 percent above their year ago volumes. Turning to a more solemn note is the overall experience of smaller towns and rural areas outside the areas included in the markets of the five trade centers where sales were off year ago totals by 13.6 percent. These data are detailed in the accompanying table.

**Changes in Retail Sales in Areas of Oklahoma**
**First 9 Months of 1987 Versus First 9 Months of 1988**

| | Sales | | |
|---|---|---|---|
| Area | 1988 ($ Millions) | 1987 ($ Millions) | Change (Percent) |
| Five Trade Centers | 8,842 | 8,179 | 8.1 |
| MSA Large Cities and Towns | 7,514 | 6,954 | 8.0 |
| Rest of MSAs | 1,328 | 1,225 | 8.4 |
| Non MSA Larger Cities and Towns | 2,310 | 2,128 | 8.5 |
| Rest of State | 1,890 | 2,188 | -13.6 |
| Total, Oklahoma | 13,042 | 12,495 | 4.4 |

## Employment

Average monthly employment in Oklahoma during the first three quarters of 1988 continued to remain below the 1987 level despite a fractional rise of 3,000 jobs in September. As a result, total employment in the State was 2 percent below the average for the first nine months of 1987.

The decrease in average monthly employment in mining, construction, retail trade and the All Other category, totaled more than 35,000 workers which caused the overall decline. The decrease in these employment sectors was, however, partially offset by an increase of 2.3 thousand new workers in manufacturing and 4.4 thousand jobs in the service trades thus leaving the monthly average for the year about 28.5 thousand below last year.

At the current rate of change there is little hope that any meaningful changes can occur in the employment situation throughout the remainder of the year. This being the case, the average monthly level by year's end is expected to reach about 1,420,000 jobs which will represent a drop of 2 percent from the 1987 average.

## Banking and Finance

Deposits in all depository financial institutions declined modestly in September which held the average deposit levels for the year 3.1 percent below that for the same period in 1987. It should be noted that, during the year thus far, demand deposits have continued to maintain a positive margin over year ago figures of about 1 percent while savings deposits have remained about 4 percent below last year. This would suggest that all categories of savings account holders are seeking types of savings mechanisms which will maximize their interest income.

It is significant that a comparison of June 1988 commercial bank data with comparable December 1987 data, both of which were released by the Federal Deposit Insurance Corporation, indicate that commercial bank deposits of all types of deposits (i.e. demand, NOW, Super NOW and Savings) held in commercial banks had risen significantly between the two periods. This being the case, savings deposits in regulated depository institutions other than commercial banks must have experienced the deposit losses.

Savings and Loan Associations have continued to fare reasonably well so far in 1988 insofar as assets are concerned. These assets, which include among other things, loans, the value of repossessions, the deposits of these institutions in other depositories, etc., rose by 6.1 percent during the first nine months of this year over a like period a year ago. However, the value of mortgage loans closed during the period declined by 32.1 percent from last year which is indicative of the restricted market for such loans as well as the increased attention management of these institutions is giving the viability of loans in general and mortgage loans in particular.

As far as the rest of the 1988 is concerned, it is likely that savings deposits in all regulated depository institutions will continue to flow into other types of investments and therefore will remain about 4.5 percent below the 1987 total for the rest of the year. Conversely, demand deposits will likely remain about 1 percent higher by the end of the year. Assets of Savings and Loan operations will probably stabilize at levels which are about 6.5 percent above 1987 while mortgage loans closed will be about 34 percent less than in 1987.

## Construction

After running slightly ahead of last year's construction activity throughout the first eight months of 1988, the fall seasonal slump again impacted the industry in September and reduced the total for the first three quarters by 2 percent from 1987. Not surprisingly, this decline closely parallels the drop in construction employment for the year to date. As might be expected, construction activity in all types of residential housing remained well below last year at this time. However, the All Other category of nonbuilding construction which includes sewer and water lines and related activities experienced an unusually sharp drop of 53.3 percent in September which reduced the level for the year 32.3 percent below last year at this time. On the brighter side, offsetting increases over levels of 1987 occurred in industrial building—up 91.9 percent, street and highway construction—up 17.2 percent and institutional building—up 5.1 percent. This latter increase was due essentially to a threefold rise in September. Construction in the five metropolitan areas presented a mixed picture with significant decreases occurring in Oklahoma City (-15.9 percent) and Muskogee (-54.2 percent). These, however, were largely offset by increases in Lawton (21.9 percent), Enid (16.3 percent) Tulsa (8.6 percent) and all areas in Oklahoma outside the five metropolitan areas (8.0 percent).

The current status of the construction industry including the continued weakness in residential building and the all other non-building sector as well as the onset of the seasonal lag in activity during fall and winter months indicates that construction activity during 1988 will drop even further behind 1987 than is the case at this time. The outlook now is for the value of construction activity in the State to end the year at about $783 million which would be a decline of approximately 3 percent.

### Manufacturing

Manufacturing activity continued to expand in 1988 as measured by industrial power sales and manufacturing employment. Industrial power sales rose 1.6 percent in September to raise the total for the first three quarters 4.4 percent ahead of the same period in 1987. This indication of growth was further reflected in the fact that average monthly manufacturing employment for the year exceeds the 1987 average by 1.5 percent. Based on the growth patterns evidenced thus far this year, manufacturing output should end the year about 4 percent ahead of last year while manufacturing employment is expected to reach 160 thousand jobs which will be an increase of approximately 1 percent over the average for 1987.

### Crude Oil and Natural Gas Production

Crude oil and natural gas production during the first nine months of 1988 both lag output for the same period a year ago. For crude oil production, the decline represents a continuation of the downward trend begun in 1985 while in the case of natural gas, the decline from year ago levels was triggered by a better than 50 percent decrease in the August output which was a reflection of the hotter weather experienced during that month.

Crude oil production during the remainder of the year should be a continuation of the pattern during the earlier portion of the year so that by year's end, the volume is expected to be down by about 3 percent to slightly more than 128 million barrels—the lowest volume of output since well before 1950. Natural gas production, on the other hand, should recover easily from the sharp August downturn and thereby end the year about 1.5 percent ahead of the 1987 volume as the colder weather experienced in November and expected for December push the demand to more than 2 trillion cubic feet.

### Personal Income

The September increase in total personal income raised the level for the first nine months to $32.7 billion dollars which was 7.7 percent ahead of the same period last year. After adjustment for inflation the total real personal income exceeded that of the same period in 1987 by 2.8 percent, meaning that the real purchasing power of Oklahomans has risen significantly during the year.

It appears now that personal income received by Oklahomans during 1988 will be between $44 and $45 billion compared with $41.4 billion in 1987. This suggests that the increase in total personal income stated in current dollars will be from 6 to 8 percent greater than was received last year.

### General Business Index

Despite a fractional decline in the General Business Index during September, the average monthly index during the first nine months of the year remained about 1 percent ahead of the average for the same period a year ago. If business activity in the State follows its usual pattern, the average index will reach 95.0 by December which represents an increase of about 1 percent over 1987.

### Outlook, 1989

Assuming that the national economy continues to grow, even modestly, during 1989, the State's economy should continue to show improvement in many sectors.

- Consumers in the West South Central area of the country (of which Oklahoma is a part) have indicated an increase in their intentions to purchase such big ticket items as automobiles, furniture and appliances which indicates that, at worst, the rate of change in retail sales experienced in 1988 should carry over into 1989. As a result, the volume of sales in current dollars should increase by between 5 and 7 percent during the year with the major portion of the rise being attributable to a significant increase in durable goods sales while nondurable sales are expected to remain flat.
- The recent pattern of changes in employment does not lend confidence that any significant changes will occur in the near future. However, new industrial construction activity which is expected to take place during 1989 could result in gains in that sector. The possibility exists that the expected employment increases in this industry might offset the decreases expected in mining and the trades and thus hold the level of wage and salary employment at about the 1988 level. Also, if the price of oil rises to $18 per barrel as the OPEC countries expect, employment in the mining sector could also rise significantly which, when coupled with the possible upturn in construction employment, then could cause total employment to increase by between 0.5 and 1 percent.
- The banking and finance sector can expect the drain on savings deposits in all institutions to continue but at a much slower pace in 1989 as the problems in the banking portion of the industry abate. However, demand deposits should continue to rise at the rates experienced throughout 1988 thus reducing the rate of decline of all deposits to about 2 percent. This would leave the level of deposits in the State's financial institutions at near $31.5 billion.
- Construction in Oklahoma during 1989 should remain at near 1988 levels as expected increases in industrial construction should

offset further decreases in residential and commercial building activity. The key to any increases in this sector of the economy is the extent to which meaningful growth occurs in street, highway and other nonbuilding activity. Should expenditures by these latter segments of the construction industry reach levels set in 1984, the total dollar volume of construction activity during 1989 would be about 2 percent above the 1988 level. However, present trends suggest that the 1989 volume will be about the same as 1988.

- Manufacturing activity, which expected to increase about 4 percent over the 1987 output total, should continue this rate of increase throughout 1989. This would result in about a 1 percent increase in manufacturing employment over 1988.

- Crude Petroleum production is expected to continue its downward trend in 1989 although at a somewhat reduced rate if oil prices reach and stabilize at $18 per barrel. However, at the present rate of decrease, crude oil production will decline by between 3 and 4 percent during 1989. If, on the other hand, the price of oil goes to $18, the decline could be about 2 percent.

  Natural gas output, conversely, is projected to increase about 2 percent in 1989.

- Personal income, which has risen sharply in 1988, should continue this pattern in 1989 and could experience an increase of 8 percent or more during the year in terms of current dollars. This rise assumes of course that the national economy will continue the growth pattern of the past three months throughout 1989.

- The General Business index has moved up rather erratically during 1988 but nevertheless it has shown growth. 1989 should be a year of more consistent growth with fewer decreases and therefore an annual increase of as much as 2.5 percent should occur during the year.

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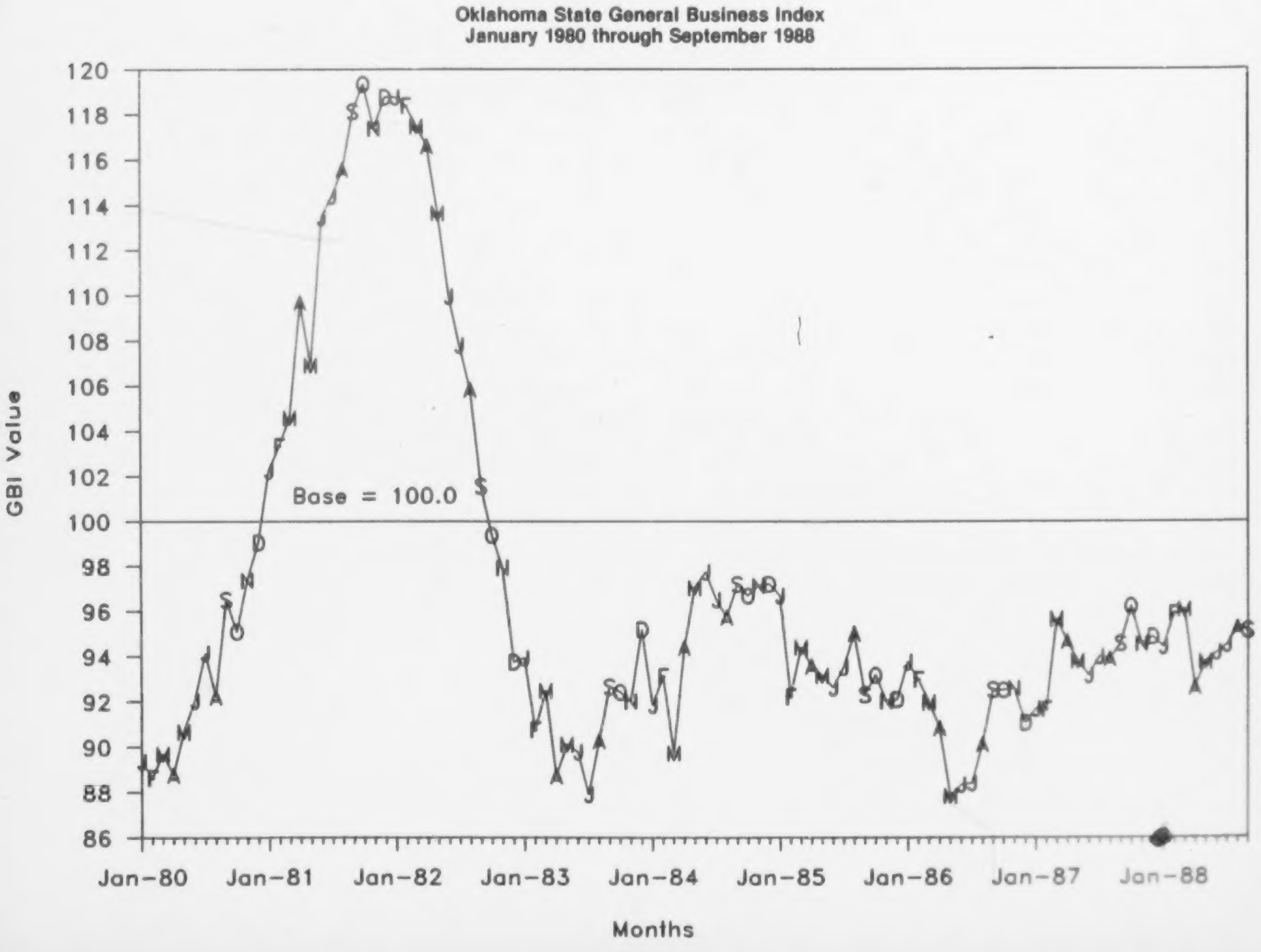

**Oklahoma State General Business Index**
**January 1980 through September 1988**

# ORIGINS: Oklahoma Resources Integrated General Information Network System

**HARLEY LINGERFELT**

IN 1987, THE OKLAHOMA LEGISLATURE passed an historic piece of legislation, the Economic Development Act of 1987. This Act reorganized and created new institutions to assist in the revitalization of the Oklahoma economy. A major part of this Act directed the Oklahoma Department of Commerce to develop and manage an economic development information system. The Act states:

"The Department shall develop and manage a complete economic information system which will support the five-year planning process, and will make available to all interested parties complete and timely information on the state economy. The economic information system shall be operated by public or private Oklahoma universities or an Oklahoma enterprise capable of providing such services in a cost-effective manner." 74 O.S. § 5003.7.

State economic information systems are not new. In a survey by Dr. Tabitha Doescher of Oklahoma State University, sixteen states were found to have economic information systems. However, an economic information system for Oklahoma is a new endeavor. After the passage of the Economic Development Act, the Department of Commerce entered into contracts with the Center for Economic and Management Research at the University of Oklahoma and the Office of Business and Economic Research at Oklahoma State University to assist in the development and operation of the information system. It was determined that significant components of an economic information system already existed at the two universities and at the Department of Commerce. The system was named ORIGINS or Oklahoma Resources Integrated General Information Network System.

## Mission/Goals

The mission of the ORIGINS program is to provide centralized, cost-efficient, accurate, timely and effective flows of information for economic development, analysis, planning and policy making in the State of Oklahoma. The ORIGINS program will develop, implement, operate and maintain the system as well as stimulate interest and usage among divergent user communities.

In order to ensure that the design for ORIGINS would be understood by all as well as followed and that progress could be monitored and reported in a timely manner, a plan was developed by the universities and the department. The hallmark of this plan was the declaration of seven goals to guide the development of ORIGINS. These goals are:

- Provide information resources for implementation of the state economic development plan.
- Meet identified information needs of a variety of users in communities, educational institutions and government.
- Establish organizational and personal linkages between users, providers and those who are knowledgeable about data.
- Build upon existing and successful economic development information systems.
- Construct an efficient information system that exhibits ease-of-use, state-wide accessibility and low operations costs.
- Promote system usage, provide training to potential users, encourage feedback from users and ensure that it remains user-oriented.
- Remain at the forefront of cost-effective technology in providing information services.

## First-Year Operation

During the first year operation of the system, the main thrusts of the ORIGINS program were to establish organizational linkages, build a community of interest and consensus of direction, identify needs and determine feasibility of a specific system, design and implement a prototype system, plan for and execute the annual publication of the *Statistical Abstract of Oklahoma*, open the system for public use and develop plans to further program.

A considerable amount of time was required during this first year in delineating tasks between the universities and the Department of Commerce. The Center for Economic and Management Research (CEMR) was designated to handle the preparation and publication of the *Statistical Abstract*, a task they have been doing for over thirty years. CEMR was named coordinator of the ORIGINS project for the University of Oklahoma. The Center was also responsible for assisting in identifying data needs, establishing a University ORIGINS committee, and for translating the *Statistical Abstract* into machine-readable form for inclusion in the ORIGINS system.

The Office of Business and Economic Research (OBER) at Oklahoma State University was designated as the coordinator of the OSU ORIGINS project. OBER was responsible for establishing an OSU ORIGINS committee, assisting in identifying user needs, conducting an in-depth study of other state economic development information systems, and designing and developing the prototype system.

The Research and Planning Division of the Oklahoma Department of Commerce was given the responsibility of managing the overall system. In addition, the Division was responsible for establishing and conducting state ORIGINS advisory committee meetings.

As stated earlier, a major activity for the first year was needs identification. There were several efforts to identify the data needs of potential users of the ORIGINS system. First, a broad-based survey of task force members from the 18 task forces set up to help for input into the state five-year economic plan, was utilized to obtain data needs. Second, a thorough examination of the several studies that have been done on problems related to Oklahoma's economic development was conducted. From these efforts, a comprehensive list of data needs was compiled.

The other major effort to survey potential users regarding their data needs involved conducting in-depth interviews with key economic development leaders in the state. The top three data needs defined in the interviews were community profiles, directory of manufacturers and listing of available buildings.

## Development of Prototype System

During the contract period, an extensive examination of appropriate technology was conducted by OSU. They selected a microcomputer bulletin board system. This system consists of a bulletin board software package (PC Board) and IBM 386 clone. Users are connected on-line through the OSU computer network and its state packet switching stations.

To access ORIGINS, a modem is used to dial telephone numbers, which are referred to as packet switching stations. There are approximately one dozen stations across Oklahoma. After accessing the packet switching stations and thus ORIGINS, users are provided a menu of data items available. A variety of options are available under each heading. All data can be downloaded if the user desires.

A unique feature of ORIGINS is the "doors" feature. In order to execute the user request for data, the computer system temporarily exits the bulletin board through a "door" where a separate computer program executes the user's request.

Currently, the prototype system is set up to handle two sessions at a time. The system can be expanded to accommodate future needs. At this time, there is no charge for accessing ORIGINS. However, there may be minimal charges assessed in the future.

## Second Year Targets

The experiences of the first year have provided a wealth of information on which to build a vibrant data system. The targets for the second year as shown below reflect these experiences.

- Review general system objectives for feasibility and effectiveness.
- Improve accuracy, integrity and response timeliness of the system and develop monitoring techniques.
- Evaluate adequacy of prototype system.
- Identify a more permanent, suitable computer environment to allow for long-range planning and development.
- Engage in widespread distribution of the system and training in use of the system.
- Continue to identify additional data needs and incorporate into the system.
- Enhance user-interface facets of ORIGINS to improve ease of use and value-added capabilities of system.
- Further develop statistical, graphic, disk-based and other value-added products and services to enhance utility of system.
- Compile and publish the *Statistical Abstract of Oklahoma*.
- Enhance user-interface facets of ORIGINS.

As can be seen, the ORIGINS system will continue to broaden its capacity and capability. It is important to note that ORIGINS is not meant to be just a collection of data bases. The intent is to also provide other services such as modeling, pre-packaged reports, maps and graphs.

## Future of ORIGINS

As should be apparent, there is no lack of ideas on items that need to be done to produce a robust and usable data system. The major players in this arena are in place and the future of ORIGINS appears secure.

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# *The Impact of the 1986 Federal Tax Reform Act On the Deduction of Federal Income Tax in the Oklahoma Tax Code*

SCOTT TURNER

## Introduction

OKLAHOMA INDIVIDUAL TAXPAYERS have the option of two tax schedules designated Method I and Method II. Method II has higher marginal rates than Method I but Method II allows the taxpayer to deduct federal income tax liability in the calculation of Oklahoma taxable income. Oklahoma tax liability is calculated using both methods and the taxpayer selects the smaller of the two.

Method II was incorporated into the Oklahoma tax code in 1979 to allow low and middle income tax filers a partial offset for their federal tax liability and the majority of Oklahoma taxpayers have selected it since that time. Method II is typically selected since it was originally designed in such a manner that most tax returns with Adjusted Gross Income (AGI) less than $40,000 should benefit from it. However, the 1986 Federal Tax Reform Act will significantly affect the usefulness of Method II for Oklahoma taxpayers.

This study shows that there will be a very large decrease in the number of Oklahoma tax returns selecting Method II and a very large decrease in the tax reduction for returns still selecting Method II after the 1986 Federal Tax Reform Act is fully phased in by tax year 1989. The results of this study also indicate that over 10 percent of the increased tax revenue to the state attributable to the Federal Tax Reform Act is in fact due to the impact of the tax reform act on Method II. The policy implication of this study is that the marginal tax rates of Method II must be reduced for all taxable income classes if the original intention of Method II is to be realized after federal tax reform.

## Data and Methodology

The March 1985 Current Population Survey (CPS) was used as the data base for the microsimulation done in this study. This data file contains a sample of Oklahoma households that can be used to generate representative federal and Oklahoma tax returns. These tax returns were processed using current law and were then processed using the provisions of the 1986 Federal Tax Reform Act.[1] The work done in this study is similar to the tax policy work done in the TRIM Model.[2]

## Results

It was observed in this analysis that the aggregate tax reduction resulting from Method II will decrease from approximately $35,000,000 before tax reform to approximately $15,000,000 after tax reform. From the point of view of Oklahoma tax revenue the difference between tax reductions of $35,000,000 and $15,000,000 will result in a $20,000,000 increase in state tax revenue.

Table 1 gives the percentage of Oklahoma tax returns that would select Method II prior to and after the 1986 Tax Reform Act. This Table is disaggregated by type of return and AGI class. From Table 1 it is seen that most Oklahoma tax returns with AGI between $5,000 and $40,000 would select Method II prior to the Tax Reform Act. After Federal Tax Reform the selection percentage declines with only a few tax returns with AGI over $30,000 selecting Method II. There is also a large reduction for Method II's selection rate for returns with AGI between $20,000 and $29,999. For example, approximately 80 percent of all joint returns with AGI between $30,000 and $39,999 should select Method II prior to the Tax Reform Act but only five percent of these returns should select Method II after tax reform. For joint tax returns with AGI between $20,000 and $29,999 the selection percentage should drop from 95

TABLE 1

Percent of Oklahoma Tax Returns
Selecting Method II Prior to and after Federal Tax Reform

| Type of Tax Return | AGI Class $5,000 to $9,999 | | $10,000 to $19,999 | | $20,000 to $29,999 | | $30,000 to $39,999 | | $40,000 to $49,999 | | All[a] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Prior | Post | Prior | Post | Prior | Post | Prior | Post | Prior | Post | Prior | Post |
| Joint | 30 | 20 | 90 | 80 | 95 | 55 | 80 | 5 | 30 | — | 75 | 40 |
| Single | 95 | 95 | 100 | 100 | 80 | 45 | 55 | — | — | — | 90 | 75 |
| HH[b] | 20 | 25 | 90 | 95 | 100 | 60 | 95 | 20 | 50 | — | 70 | 60 |

[a] No Method II returns were observed in the sample with AGI greater than $50,000.

[b] Head-of-Household Return.

TABLE 2

Average Tax Reduction
for Tax Returns Selecting Method II

| Type of Tax Return | AGI Class $5,000 to $9,999 | | $10,000 to $19,999 | | $20,000 to $29,999 | | $30,000 to $39,999 | | $40,000 to $49,999 | | All[a] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Prior | Post | Prior | Post | Prior | Post | Prior | Post | Prior | Post | Prior | Post |
| Joint | $10 | $5 | $30 | $20 | $60 | $25 | $45 | $5 | $15 | — | $40 | $20 |
| Single | $20 | $20 | $60 | $60 | $60 | $40 | $30 | — | — | — | $60 | $50 |
| HH[b] | $10 | $5 | $40 | $25 | $90 | $40 | $90 | $10 | $30 | — | $50 | $25 |

[a] No Method II returns were observed in the sample with AGI greater than $50,000.

[b] Head-of-Household Return.

percent to approximately 55 percent. From Table 1 it is observed that the phase-out for Method II will drop from approximately $40,000 to approximately $30,000 as a consequence of the Federal Tax Reform Act.

Table 2 gives the average tax reduction for Oklahoma tax returns selecting Method II both prior to and after the Tax Reform Act. For example, the average tax reduction for joint tax returns selecting Method II with AGI between $20,000 and $29,999 declines from $60 to $25 as a consequence of the Federal Tax Reform Act. The average tax reduction for all joint returns selecting Method II falls from $40 to $20 as a consequence of the Tax Reform Act.

From Tables 1 and 2 it is observed that the value of Method II to Oklahoma taxpayers is greatly reduced as a consequence of the 1986 Federal Tax Reform Act. Table 1 indicates that there will be a large reduction in the number of Oklahoma tax returns selecting Method II and Table 2 indicates that there will be a large reduction in tax savings for returns still selecting Method II after the 1986 Federal Tax Reform Act is fully phased in.

Method II taxable income is obtained by subtracting federal tax liability from Method I taxable income. Method I taxable income will increase for some tax returns and federal tax liability will decrease for most Oklahoma tax returns that selected Method II prior to federal tax reform. The net effect of these changes is that the typical Method II tax filer will have more Method II taxable income and be placed in a higher Method II marginal tax class. Consequently it should be expected that the tax reduction from Method II should fall. However, it is surprising that federal tax reform would have such a large impact on Method II.

Another item observed from the tax returns analyzed in this study is that none of the Oklahoma tax returns selected Method II using a marginal tax rate of over 10 percent either before or after the federal tax reform. Consequently the change implemented by the Legislature last year to reduce Method II's top marginal rate from 17 percent to 10 percent will not affect any typical tax return.

## Summary and Conclusions

The results of this study indicate that the 1986 Federal Tax Reform Act will greatly diminish the usefulness of Method II to Oklahoma taxpayers. The approximate phase-out of Method II will be reduced from AGI equal to $40,000 to AGI equal to $30,000. The overall tax reduction for Oklahoma taxpayers from Method II will be reduced from approximately $35,000,000 to approximately $15,000,000.

The reason stated for placing Method II in the Oklahoma tax code several years ago was to allow low and middle income Oklahoma taxpayers to deduct their federal tax liability. However, Method II was not designed to automatically adjust to large changes in the federal tax code. Consequently, Method II's marginal rate structure must be lowered (for all AGI classes) if the original intention of Method II is to be realized once again.

## Notes

[1] Scott Turner, "A Microanalytic Simulation of Federal Tax Reform on Oklahoma Tax Filing Units," *Oklahoma Business Bulletin* (March 1987), pp. 21-23.

[2] H. Beebout and P. Bonina, "TRIM: A Microsimulation Model for Evaluating Transfer Income Policy." Working Paper NO. 971-4 (Washington, D.C.: The Urban Institute, 1973).

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# *Banking Conditions in Oklahoma and Surrounding States June 1988*

NEIL J. DIKEMAN, JR.

THE BANKING INDUSTRY in the southwest has generally exhibited weaknesses and instability during the past six years. Much of the deterioration in the industry has been due to the collapse of the energy industry in combination with the farm problems both of which are large contributors to the economies of the various southwestern states. Recent banking data indicates that some recovery from the problems faced by banks in this area is underway and that Oklahoma banks may be recovering more rapidly than banks in the surrounding states. This article provides an overview of the progress made by the average Oklahoma bank between December 1987 and June 1988. It also compares these changes with those of average of all banks in Arkansas, Kansas, Louisiana and Texas.

## Oklahoma Banking

The problems which have confronted Oklahoma's banking industry since 1982 now appear to be slowly abating as is reflected by a comparison of data obtained from the June 1988 bank call reports with similar data elicited from the December 1987 report compiled by the Federal Deposit Insurance Corporation (see Table 1).

The most significant improvements noted during the study period were the 13.2 percent increase in average owners equity and the 11.4 percent rise in average total assets. A major portion of the increase in average assets can be attributed to a 14 percent increase in the average value of securities held by these banks and a 64.4 percent rise in federal funds sold including the revenue returns on such sales. Lesser gains which occurred in other asset categories however, tended to dampen the effects of these relatively large increases as shown in Table 2.

It is interesting to note that the sharp increases in average loan loss reserves from December 1987 to June 1988 raised the ratio of reserves for loan losses to loans by 0.2 percent (i.e. from 2.7 percent in December to 2.9 percent in June) which suggests that the banking industry has generally become more selective in its lending policies and is more willing to write off questionable loans.

The increase of 9.0 percent in average total deposits since December is likewise encouraging in that it reverses the two year decline in this important

**TABLE 1**

**Changes in Average Assets, Deposits, Loans and Discounts, Total Liabilities and Stockholders Equity and Net Income of Oklahoma Banks December 1987 and June 1988**

| Item | June 1988 ($000) | December 1987 ($000) | Change (Percent) |
|---|---|---|---|
| Total Assets | 54,750 | 49,159 | 11.4 |
| Total Deposits | 47,779 | 43,950 | 8.7 |
| Total Liabilities | 50,574 | 45,487 | 11.1 |
| Net Loans and Leases | 25,382 | 23,874 | 6.3 |
| Stockholders Equity | 4,176 | 3,690 | 13.2 |
| Net Income | 24[a] | (24) | NA |

[a]First six months.

NA = Not Appropriate.

Source: Call Reports, FDIC, December 31, 1987 and June 30, 1988.

TABLE 2

**Average Assets of Oklahoma Banks
by Type of Asset
December 1987 and June 1988**

| Asset Category | June 1988 ($000) | December 1987 ($000) | Change (Percent) |
|---|---|---|---|
| Cash and Due from Banks | 5,022 | 4,857 | 3.4 |
| Total Securities | 17,186 | 15,082 | 14.0 |
| Fed Funds Sold | 3,937 | 2,395 | 64.4 |
| Total Loans and Leases | 26,151 | 24,559 | 6.5 |
| Less Loan Loss Reserve | 769 | 685 | 12.3 |
| Net Loans and Leases | 25,382 | 23,874 | 6.3 |
| Real Estate Owned | 993 | 866 | 14.7 |
| All Other Assets | 2,251 | 2,105 | 6.9 |
| Total Assets | 54,750 | 49,159 | 11.4 |

Source: Call Reports, FDIC, December 31, 1987 and June 30, 1988.

TABLE 3

**Average Deposits in Oklahoma Banks
by Type of Deposit
December 1987 and June 1988**

| Type of Deposit | June 1988 ($000) | December 1987 ($000) | Change (Percent) |
|---|---|---|---|
| Demand | 8,658 | 7,794 | 11.1 |
| NOW, Super NOW and Savings | 15,541 | 14,167 | 9.6 |
| Deposits of $100,000 and above | 7,566 | 6,973 | 8.4 |
| All Other Deposits[a] | 16,014 | 14,909 | 7.4 |
| Total Deposits | 47,779 | 43,843 | 9.0 |

[a] Includes foreign deposits.

Source: Call Reports, FDIC, December 31, 1987 and June 30, 1988.

element and occurred despite the fact that eight banks were closed during the period. The most significant relative change in the deposit structure of the average Oklahoma bank is the 11.1 percent increase in demand deposits while the largest dollar change is the $1.4 million change in NOW, Super NOW and Savings accounts. Changes in these and other categories of average deposits are shown in Table 3.

Another important indication that the health of Oklahoma's banking industry is improving is the fact that net income of the average bank will apparently show a gain in 1988 and will thus reverse the losses incurred in 1986 and 1987. While the increase in net income during the year is not expected to be great, it nonetheless suggests that the worst is over and that the industry will once again experience the growth patterns of the pre-1982 era. The fact that stockholders' equity in the average bank has increased since last December also represents a reversal of the past four years. This increase indicates that the average Oklahoma bank is stronger in terms of its capitalization and thus less susceptible to failure.

## Banking in Surrounding States vs Oklahoma

In addition to evidencing growth during the six month period ending June 30, 1988, the condition of the average Oklahoma bank is significantly better than that of the average bank in surrounding states despite the fact that the average bank in these states is nearly twice the size of the average Oklahoma bank. The most significant differences between the condition of banks in the states peripheral to Oklahoma are:

- Where total assets of the average Oklahoma bank increased 11.4 percent they rose by only 0.7 percent in the average bank in the other states.
- Net loans and leases in the average Oklahoma bank were up by 6.3 percent while this item declined by 0.4 percent in the other states.
- Total deposits in the average Oklahoma bank increased 9.0 percent but declined 0.1 percent in the other states.
- Stockholders equity which increased 13.2 percent in the average Oklahoma bank, decreased 5.0 percent in the other states.
- Net income of the average Oklahoma bank rose for the first six months of 1988 but continued to show a loss in the average bank in the other states.

These data are shown in greater detail in Table 4.

## Summary

In summary, the recent banking data released by the FDIC show evidence that the banking industry in Oklahoma clearly improved during the first half of the year in all measures of bank operation. Moreover, the improvements noted thus far in the year are such that further gains are expected during the latter half of the year. The outflow of deposits from banks has apparently ceased and is beginning to return to banks; the demand for viable loans has increased; assets increased significantly; stockholders' equity has been increased and net earnings for the first six months have erased the losses incurred in 1987.

**TABLE 4**

**Changes in Selected Banking Activities in Oklahoma Banks Compared with Those in Surrounding States by Activity December 1987 and June 1988**

| Activity | Oklahoma (Percent Change) | Surrounding States (Percent Change) |
|---|---|---|
| Total Assets | 11.4 | 0.7 |
| Total Deposits | 9.0 | -0.1 |
| Demand | 11.1 | -6.4 |
| NOW, Super NOW, Savings | 9.6 | 0.2 |
| Deposits of $100,000 or more | 8.4 | -2.2 |
| All Other Deposits | 7.4 | 8.2 |
| Total Liabilities | 11.1 | 1.0 |
| Net Loans and Leases | 6.3 | -0.4 |
| Stockholders Equity | 13.2 | -5.0 |

Source: Call Reports, FDIC, December 31, 1987 and June 30, 1988.

Not only has the banking structure in the State become stronger but its gains have largely been counter to the pattern in surrounding states. This divergence is best witnessed by the decreases which have occurred in loans and leases, deposits, stockholders' equity, net interest margin and net earnings in the institutions in the other states. This suggests that the actions taken by State and Federal regulators in closing problem banks in Oklahoma has strengthened the industry in the State.

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# OKLAHOMA BUSINESS BULLETIN

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THE UNIVERSITY OF OKLAHOMA

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## SUMMARY OF INDICATORS

| Category | 10 Mos. '88 | 10 Mos. '87 | Oct. '88 | Percentage Change 10 Mos. '88/'87 | Percentage Change Oct./Sept. '88 |
|---|---|---|---|---|---|
| **Personal Income (Monthly Average)** | | | | | |
| Unadjusted ($000,000) | 3,646 | 3,412 | 3,784 | 6.9 | 1.7 |
| Adjusted for CPI ($000,000) | 3,095 | 3,011 | 3,148 | 2.8 | 1.4 |
| **Crude Oil Production (000 bbl)** | 90,096$^{a}$ | 92,801$^{a}$ | 9,472$^{a}$ | -2.9$^{a}$ | -5.1$^{a}$ |
| **Natural Gas Production (000 mcf)** | 1,524,497$^{a}$ | 1,502,633$^{a}$ | 137,076$^{a}$ | 1.5$^{a}$ | -19.4$^{a}$ |
| **Industrial Power Sales (000,000 Kwh)$^{b}$** | 7,132 | 6,846 | 718 | 4.2 | -5.7 |
| **Total Bank Deposits (Monthly Average) ($000,000)$^{c}$** | | | | | |
| Demand | 7,558 | 7,520 | 7,439 | 0.5 | -0.0 |
| Savings | 24,439 | 25,464 | 24,164 | -4.0 | -0.1 |
| **Savings and Loan Associations ($000,000)** | | | | | |
| Assets | 10,466 | 9,838 | 10,704 | 6.4 | 0.1 |
| New Mortgage Loans Closed | 545 | 803 | 41 | -32.2 | -32.1 |
| **Employment** | | | | | |
| Total Labor Force$^{d}$ | 1,518.1 | 1,564.6 | 1,508.7 | -3.0 | 0.9 |
| Total Employment | 1,418.9 | 1,448.8 | 1,413.0 | -2.1 | 0.6 |
| Unemployment Rate | 6.5 | 7.6 | 6.3 | — | — |
| **General Business Index** | 94.7 | 94.0 | 94.8 | 0.8 | -0.4 |

Note: Includes revisions.

[a] 9 months and September data.

[b] Sales of larger privately owned utility companies.

[c] Total deposits of all depository institutions.

[d] Civilian Labor Force.

## RETAIL TRADE IN SELECTED CITIES
($000)

| City | Oct. '88 Adjusted | Oct. '88 Unadjusted | Adjusted '88/'87 10 Mos. | Adjusted 1988 Oct./Sept. |
|---|---|---|---|---|
| Ada | 15,192 | 14,948 | 4.8 | 2.5 |
| Altus | 13,083 | 13,005 | 5.9 | -4.0 |
| Alva | 4,172 | 4,114 | 7.7 | 2.9 |
| Anadarko | 5,194 | 5,019 | 7.9 | 4.0 |
| Ardmore | 20,344 | 19,821 | 7.5 | 0.6 |
| Bartlesville | 18,867 | 18,805 | 5.7 | -8.4 |
| Blackwell | 3,457 | 3,517 | 18.7 | -0.1 |
| Broken Arrow | 20,572 | 20,274 | 13.8 | -2.0 |
| Chickasha | 9,650 | 9,655 | 9.7 | -6.0 |
| Clinton | 6,751 | 6,877 | 14.5 | -6.9 |
| Cushing | 5,627 | 5,357 | 5.9 | -2.0 |
| Del City | 11,638 | 11,396 | 0.7 | -0.9 |
| Duncan | 14,032 | 13,790 | 19.5 | -11.1 |
| Durant | 11,308 | 11,125 | 8.2 | 2.3 |
| Edmond | 24,424 | 24,164 | 16.7 | -7.1 |
| Elk City | 8,172 | 8,011 | 12.1 | -1.3 |
| El Reno | 8,401 | 8,423 | 11.0 | -4.2 |
| Guthrie | 5,400 | 5,304 | 9.3 | -3.0 |
| Guymon | 4,784 | 4,695 | 6.7 | -2.8 |
| Henryetta | 5,031 | 4,808 | 9.0 | 2.5 |
| Hobart | 2,445 | 2,467 | 7.1 | -2.2 |
| Holdenville | 2,764 | 2,767 | 7.2 | -7.5 |
| Hugo | 3,142 | 3,185 | 9.6 | 4.5 |
| Idabel | 3,519 | 3,522 | 3.8 | -12.2 |
| Lawton | 48,318 | 46,968 | 5.5 | -2.2 |
| McAlester | 10,399 | 10,555 | 9.0 | -1.1 |
| Miami | 11,503 | 11,201 | 5.1 | -3.0 |
| Midwest City | 36,269 | 35,027 | 7.5 | 0.4 |
| Moore | 12,674 | 12,668 | 1.6 | -4.6 |
| Muskogee | 31,492 | 31,485 | 6.5 | 2.7 |
| Norman | 63,346 | 64,148 | 13.3 | -5.7 |
| Oklahoma City | 297,266 | 282,959 | 7.3 | -0.4 |
| Okmulgee | 5,466 | 5,374 | 5.0 | -0.9 |
| Pauls Valley | 4,456 | 4,474 | 14.7 | 2.6 |
| Pawhuska | 1,731 | 1,638 | 7.6 | 1.9 |
| Ponca City | 17,029 | 16,760 | 11.0 | -1.8 |
| Poteau | 4,435 | 4,521 | 13.3 | -16.3 |
| Sand Springs | 8,651 | 8,475 | 5.9 | -2.8 |
| Sapulpa | 13,477 | 13,375 | 8.6 | -1.8 |
| Seminole | 5,867 | 5,830 | 6.3 | -3.7 |
| Shawnee | 20,794 | 20,609 | 10.5 | -23.1 |
| Stillwater | 25,059 | 25,211 | 7.7 | -0.1 |
| Tahlequah | 7,817 | 7,862 | 2.1 | 2.6 |
| Tulsa | 246,761 | 244,159 | 8.3 | -4.9 |
| Watonga | 2,077 | 1,963 | 5.7 | 0.9 |
| Weatherford | 5,691 | 5,776 | 10.2 | -2.4 |
| Wewoka | 1,116 | 1,158 | 4.2 | -13.5 |
| Woodward | 12,105 | 12,174 | 10.4 | 0.9 |
| **Total** | 1,121,768 | 1,099,419 | 8.4 | -3.0 |

## RETAIL TRADE IN METRO AREAS AND STATE
($000)

| | | | | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | 10 Mos. '88 | 10 Mos. '87 | Oct. '88 | | 10 Mos. '88/'87 | Oct./Sept. '88 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| **OKLAHOMA CITY MSA** | | | | | | | |
| Food | 1,939,704 | 1,870,379 | 210,157 | 196,339 | 3.7 | 3.8 | -1.2 |
| Apparel | 143,984 | 150,916 | 14,154 | 13,632 | -4.6 | -1.1 | -2.9 |
| General Merchandise | 631,402 | 589,365 | 65,388 | 60,665 | 7.1 | -0.6 | 5.1 |
| Furniture | 206,437 | 208,762 | 23,774 | 22,778 | -1.1 | -0.4 | -5.9 |
| Lumber | 148,082 | 141,622 | 15,160 | 15,701 | 4.6 | 0.8 | -0.8 |
| Auto Dealers | 1,611,286 | 1,301,368 | 155,805 | 165,829 | 23.8 | -15.1 | -3.9 |
| Service Stations | 169,002 | 170,707 | 15,962 | 16,091 | -1.0 | -8.5 | -14.8 |
| All Other | 631,527 | 610,517 | 62,456 | 59,356 | 3.4 | -0.4 | 2.7 |
| Total | 5,481,424 | 5,043,636 | 562,856 | 550,391 | 8.7 | -3.8 | -1.7 |
| **TULSA MSA** | | | | | | | |
| Food | 1,133,210 | 1,105,634 | 119,398 | 116,972 | 2.5 | 0.9 | 2.5 |
| Apparel | 131,279 | 140,559 | 12,711 | 11,936 | -6.6 | 0.9 | -0.3 |
| General Merchandise | 547,237 | 486,220 | 56,976 | 54,232 | 12.5 | 1.3 | 6.1 |
| Furniture | 127,791 | 115,997 | 11,493 | 11,134 | 10.2 | -10.1 | -12.8 |
| Lumber | 113,004 | 116,146 | 12,497 | 12,606 | -2.7 | -0.4 | -2.4 |
| Auto Dealers | 937,515 | 757,195 | 90,657 | 96,487 | 23.8 | -15.1 | -3.9 |
| Service Stations | 138,848 | 140,238 | 13,114 | 13,220 | -1.0 | -8.5 | -14.8 |
| All Other | 118,229 | 132,578 | 11,665 | 8,473 | -10.8 | 9.8 | -27.9 |
| Total | 3,247,113 | 2,994,567 | 328,511 | 325,060 | 8.4 | -4.6 | -1.7 |
| **ENID MSA** | | | | | | | |
| Food | 93,545 | 94,005 | 9,739 | 9,764 | -0.5 | -5.1 | 0.1 |
| Apparel | 13,450 | 15,103 | 1,254 | 1,192 | -10.9 | -16.3 | -9.6 |
| General Merchandise | 42,312 | 40,442 | 4,328 | 4,187 | 4.6 | 1.4 | 14.9 |
| Furniture | 10,390 | 9,909 | 997 | 977 | 4.9 | 1.4 | 1.2 |
| Lumber | 13,153 | 13,313 | 1,281 | 1,499 | -1.2 | 6.4 | 19.8 |
| Auto Dealers | 92,220 | 74,483 | 8.918 | 9,491 | 23.8 | -15.1 | -3.9 |
| Service Stations | 12,454 | 12,584 | 1,176 | 1,185 | -1.0 | -8.6 | -14.8 |
| All Other | 29,760 | 29,783 | 3,482 | 2,915 | -0.1 | 24.3 | 11.5 |
| Total | 307,284 | 289,622 | 31,175 | 31,210 | 6.1 | -5.0 | 1.3 |
| **LAWTON MSA** | | | | | | | |
| Food | 158,870 | 158,894 | 16,397 | 16,183 | -0.0 | 1.7 | 7.1 |
| Apparel | 18,024 | 18,206 | 1,804 | 1,677 | -1.0 | -6.6 | -11.3 |
| General Merchandise | 124,508 | 116,761 | 13,172 | 11,752 | 6.6 | 3.3 | 12.1 |
| Furniture | 23,539 | 22,257 | 2,260 | 2,096 | 5.8 | -4.0 | -4.0 |
| Lumber | 14,234 | 16,510 | 1,142 | 1,162 | -13.8 | -13.2 | -14.0 |
| Auto Dealers | 122,893 | 99,260 | 11,884 | 12,648 | 23.8 | -15.1 | -3.9 |
| Service Stations | 8,504 | 8,591 | 803 | 810 | -1.0 | -8.5 | -14.7 |
| All Other | 31,196 | 35,842 | 3,232 | 2,908 | -13.0 | 7.0 | -9.1 |
| Total | 501,768 | 476,321 | 50,694 | 49,236 | 5.3 | -3.2 | 1.9 |
| **MUSKOGEE AREA** | | | | | | | |
| Food | 111,630 | 111,853 | 14,856 | 14,242 | -0.2 | 26.2 | 22.2 |
| Apparel | 17,775 | 16,295 | 1,772 | 1,659 | 9.1 | -19.5 | -21.8 |
| General Merchandise | 39,068 | 35,041 | 3,847 | 3,755 | 11.5 | 1.4 | 10.5 |
| Furniture | 9,789 | 11,856 | 867 | 940 | -17.4 | -23.3 | -14.4 |
| Lumber | 3,657 | 4,322 | 383 | 437 | -15.4 | -5.0 | -0.7 |
| Auto Dealers | 77,589 | 62,675 | 7,529 | 7,977 | 23.8 | -14.7 | -3.9 |
| Service Stations | 10,883 | 11,013 | 1.028 | 1,036 | -1.2 | -8.5 | -14.8 |
| All Other | 27,593 | 29,885 | 1,520 | 2,428 | -7.7 | -41.3 | 5.0 |
| Total | 297,984 | 282,940 | 31,802 | 32,474 | 5.3 | -0.1 | 6.3 |
| **STATE**[a] | | | | | | | |
| **Durable Goods** | 5,570,972 | 4,753,015 | 536,466 | 569,539 | 17.2 | -12.4 | -2.7 |
| Auto Dealers | 4,025,772 | 3,251,687 | 389,283 | 414,323 | 23.8 | -15.1 | -3.9 |
| Accessory Dealers | 275,513 | 274,125 | 27,262 | 26,773 | 0.5 | -3.0 | -2.3 |
| Total Automotive | 4,301,285 | 3,525,812 | 416,545 | 441,096 | 22.0 | -14.4 | -3.8 |
| Furniture | 286,205 | 267,470 | 29,276 | 29,556 | 7.0 | -1.5 | 0.3 |
| Household Appliances | 192,804 | 189,946 | 18,013 | 18,420 | 1.5 | -0.6 | 2.7 |
| Total Furniture and Appliances | 479,009 | 457,416 | 47,289 | 47,976 | 4.7 | -1.2 | 1.2 |
| Lumber and Building Materials | 462,887 | 466,833 | 47,267 | 50,439 | -0.8 | 1.9 | 2.6 |
| Hardware Stores | 55,065 | 52,632 | 5,500 | 5,266 | 4.6 | 4.5 | 6.0 |
| Total Lumber, Building Materials & Hardware | 517,952 | 519,465 | 52,767 | 55,705 | -0.3 | 2.2 | 2.9 |
| **Nondurable Goods** | 8,939,328 | 9,114,653 | 919,575 | 886,703 | -1.9 | 0.3 | 1.0 |
| Apparel | 497,503 | 519,901 | 49,039 | 46,932 | -4.3 | -1.4 | -2.2 |
| Drug Stores | 413,158 | 452,746 | 40,994 | 41,279 | -8.7 | -4.2 | 3.5 |
| Eating and Drinking Places | 1,572,145 | 1,579,858 | 162,723 | 163,353 | -0.5 | 1.1 | 3.9 |
| Food Group | 3,652,011 | 3,792,093 | 386,791 | 365,837 | -3.7 | 2.0 | 0.3 |
| Service Stations | 554,933 | 560,544 | 52,416 | 52,839 | -1.0 | -8.5 | -14.8 |
| General Merchandise Group | 1,640,754 | 1,575,873 | 164,526 | 160,065 | 4.1 | -0.8 | 7.8 |
| **Total Retail Trade** | 14,510,300 | 13,867,668 | 1,456,041 | 1,456,242 | 4.6 | -4.8 | -0.5 |

[a] Total includes data for categories not shown in the table.

## ENID AND LAWTON MSAs
## MUSKOGEE MA

| Category | 10 Mos. '88 | 10 Mos. '87 | Oct. '88 | Percentage Change | |
|---|---|---|---|---|---|
| | | | | 10 Mos. '88/'87 | Oct./Sept. '88 |
| **ENID MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 29,450 | 30,450 | 28,800 | -2.0 | 0.9 |
| Total Employment | 27,852 | 28,222 | 27,275 | -1.3 | 0.4 |
| Unemployment Rate (%) | 5.4 | 7.1 | 5.3 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 785 | 1,726 | 215 | -54.5 | 79.2 |
| Number of Units | 8 | 18 | 2 | -55.6 | 100.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Number of Units | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 818 | 464 | 14 | 76.3 | -60.5 |
| Industrial ($000) | 0 | 1,194 | 0 | — | 0.0 |
| Institutional ($000) | 300 | 2,052 | 0 | -85.4 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 2,692 | 772 | 0 | 248.6 | 0.0 |
| All Other Nonbuilding ($000) | 152 | 318 | 0 | -52.2 | 0.0 |
| Total Construction ($000) | 4,748 | 6,527 | 229 | -27.3 | 47.0 |
| **LAWTON MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 49,312 | 49,738 | 47,725 | -0.9 | -0.7 |
| Total Employment | 46,608 | 47,268 | 44,975 | -1.4 | -1.0 |
| Unemployment Rate (%) | 5.5 | 5.0 | 5.8 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 10,982 | 16,403 | 547 | -33.1 | -29.5 |
| Number of Units | 141 | 254 | 6 | -44.5 | -33.3 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 180 | 400 | 0 | -55.0 | 0.0 |
| Number of Units | 6 | 16 | 0 | -62.5 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 4,162 | 3,503 | 640 | 18.8 | 30.6 |
| Industrial ($000) | 830 | 20 | 0 | E | 0.0 |
| Institutional ($000) | 1,390 | 1,400 | 0 | -0.7 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 7,962 | 817 | 0 | E | — |
| All Other Nonbuilding ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Total Construction ($000) | 25,505 | 22,543 | 1,187 | 13.1 | -83.6 |
| **MUSKOGEE MA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force | 31,550 | 32,688 | 31,220 | -3.5 | -0.4 |
| Total Employment | 28,688 | 30,020 | 28,575 | -4.4 | 0.4 |
| Unemployment Rate (%) | 9.2 | 8.8 | 8.5 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 216 | 1,414 | 0 | -84.8 | 0.0 |
| Number of Units | 2 | 15 | 0 | -86.7 | 0.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 75 | 0 | — | 0.0 |
| Number of Units | 0 | 2 | 0 | — | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 400 | 6,660 | 0 | -94.0 | 0.0 |
| Industrial ($000) | 0 | 20 | 0 | — | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 3,160 | 855 | 0 | 269.6 | 0.0 |
| All Other Nonbuilding ($000) | 5 | 0 | 0 | — | 0.0 |
| Total Construction ($000) | 3,781 | 9,024 | 0 | -58.1 | 0.0 |

Note: Includes revisions.

E = Exceeds 600 percent.

Sources for all tables: Local utilities companies; 10th Federal Reserve District Member Banks; Federal Home Loan Bank of Topeka; Oklahoma Employment Security Commission; United States Department of Commerce, Construction Statistics Division; Oklahoma Department of Transportation, *Progressive Report of the Transportation Director;* Center for Economic and Management Research, College of Business Administration, The University of Oklahoma. The data for all tables were compiled by Marjorie E. Earley, Statistician for CEMR and Brian M. Hickey, Research Assistant.

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**Center for Economic and Management Research**
**University of Oklahoma**
**Norman, Oklahoma 73069**

## OKLAHOMA CITY AND TULSA MSAs

| Category | 10 Mos. '88 | 10 Mos. '87 | Oct. '88 | Percentage Change 10 Mos.'88/'87 | Percentage Change Oct./Sept. '88 |
|---|---|---|---|---|---|
| **OKLAHOMA CITY MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 496,430 | 509,850 | 489,700 | -2.6 | -0.1 |
| Total Employment | 469,560 | 478,460 | 463,300 | -1.9 | -0.4 |
| Unemployment Rate (%) | 5.4 | 6.2 | 5.4 | — | — |
| **Mortgage Loans Closed ($000,000)** | 95.3[b] | 175.9[b] | 11.9[b] | -45.8[b] | -17.4[b] |
| **Bank Deposits ($000,000)[c]** | | | | | |
| Demand Deposits | 821 | 917 | 818 | -10.5 | -12.1 |
| Time and Savings Deposits | 1,143 | 1,656 | 1,200 | -31.0 | 3.3 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 97,110 | 115,710 | 9,742 | -16.1 | 10.9 |
| Number of Units | 1,360 | 1,811 | 143 | -24.9 | 28.8 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 1,374 | 4,579 | 0 | -70.0 | 0.0 |
| Number of Units | 75 | 135 | 0 | -44.4 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 63,929 | 103,330 | 6,639 | -38.1 | -40.9 |
| Industrial ($000) | 5,469 | 2,813 | 172 | 94.4 | E |
| Institutional ($000) | 15,874 | 16,820 | 2,614 | -5.6 | -27.2 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 55,022 | 48,902 | 2,130 | 12.5 | 127.6 |
| All Other Nonbuilding ($000) | 1,935 | 3,304 | 132 | -41.4 | -9.5 |
| Total Construction ($000) | 240,714 | 295,459 | 21,428 | -18.5 | -13.3 |
| **General Business Index** | 92.4 | 89.1 | 94.2 | 3.7 | -0.4 |
| **TULSA MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 339,600 | 349,380 | 338,400 | -2.8 | 1.0 |
| Total Employment | 315,240 | 319,810 | 315,400 | -1.4 | 0.9 |
| Unemployment Rate (%) | 7.2 | 8.4 | 6.8 | — | — |
| **Mortgage Loans Closed ($000,000)** | 187.5[b] | 214.9[b] | 22.1[b] | -12.8[b] | -20.0[b] |
| **Bank Deposits ($000,000)[c]** | | | | | |
| Demand Deposits | 880 | 850 | 669 | 3.5 | -25.4 |
| Time and Savings Deposits | 2,169 | 2,310 | 2,174 | -6.1 | -1.3 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 90,849 | 105,076 | 7,680 | -13.5 | -11.6 |
| Number of Units | 1,194 | 1,506 | 109 | -20.7 | -4.4 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 1,378 | 11,095 | 0 | -87.6 | — |
| Number of Units | 58 | 516 | 0 | -88.8 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 56,792 | 17,725 | 10,826 | 220.4 | E |
| Industrial ($000) | 15,471 | 11,443 | 453 | 35.2 | -76.0 |
| Institutional ($000) | 14,133 | 12,053 | 3,443 | 17.3 | 54.5 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 35,136 | 30,752 | 2,283 | 14.3 | -13.9 |
| All Other Nonbuilding ($000) | 3,223 | 3,670 | 114 | -12.2 | -24.4 |
| Total Construction ($000) | 216,982 | 191,813 | 24,799 | 13.1 | 51.7 |
| **General Business Index** | 88.4 | 87.3 | 89.9 | 1.3 | -0.2 |

Note: Includes revisions. E = Exceeds 600 percent.

[a] Civilian Labor Force.

[b] By Savings and Loan Associations, 9 months and September data.

[c] Total deposits in large commercial banks (accounted for 36 percent of all commercial bank deposits as of December 31, 1987 for Oklahoma City and 50 percent of all commercial bank deposits as of December 31, 1987 for Tulsa).

## CONSTRUCTION, STATE

| Category | 10 Mos. '88 | 10 Mos. '87 | Oct. '88 | Percentage Change 10 Mos. '88/'87 | Percentage Change Oct./Sept. '88 |
|---|---|---|---|---|---|
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 220,119 | 261,518 | 19,975 | -15.8 | -6.2 |
| Number of Units | 2,962 | 3,869 | 282 | -23.4 | 6.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 5,651 | 18,996 | 0 | -70.3 | — |
| Number of Units | 277 | 784 | 0 | -64.7 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 137,925 | 147,249 | 18,974 | -6.3 | 46.1 |
| Industrial ($000) | 29,766 | 16,599 | 3,949 | 79.3 | 94.8 |
| Institutional ($000) | 38,150 | 40,398 | 7,104 | -5.6 | 20.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 242,736 | 223,739 | 8,245 | 8.5 | -60.2 |
| All Other Nonbuilding ($000) | 5,570 | 7,616 | 260 | -26.9 | -17.0 |
| Total Construction ($000) | 679,917 | 716,116 | 58,507 | -5.1 | -10.0 |

Note: Includes revisions.

MILLIMETERS

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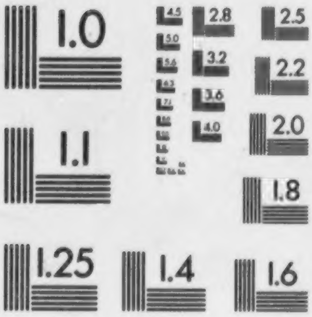
(ANSI and ISO TEST CHART No. 2)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# OKLAHOMA BUSINESS BULLETIN

CENTER FOR ECONOMIC AND MANAGEMENT RESEARCH
COLLEGE OF BUSINESS ADMINISTRATION
THE UNIVERSITY OF OKLAHOMA

CONGRESSIONAL INFO. SERVICE/SRI
ATTN: ROBERTA B. MASON
4520 EAST-WEST HIGHWAY
BETHESDA MD 20814

ISSN 0030-1671

February 1989

VOL. 57, ISSUE 2

## SUMMARY OF INDICATORS

| Category | 11 Mos. '88 | 11 Mos. '87 | Nov. '88 | Percentage Change<br>11 Mos. '88/'87 | Percentage Change<br>Nov./Oct. '88 |
|---|---|---|---|---|---|
| **Personal Income (Monthly Average)** | | | | | |
| Unadjusted ($000,000) | 3,643 | 3,416 | 3,745 | 6.6 | -0.2 |
| Adjusted for CPI ($000,000) | 3,089 | 3,010 | 3,113 | 2.6 | -0.3 |
| **Crude Oil Production (000 bbl)** | 99,546[a] | 102,954[a] | 9,400[a] | -3.3[a] | -1.0[a] |
| **Natural Gas Production (000 mcf)** | 1,709,259[a] | 1,670,057[a] | 145,280[a] | 2.3[a] | -14.7[a] |
| **Industrial Power Sales (000,000 Kwh)**[b] | 7,845 | 7,531 | 714 | 4.2 | -0.6 |
| **Total Bank Deposits (Monthly Average) ($000,000)**[c] | | | | | |
| Demand | 7,551 | 7,513 | 7,485 | 0.5 | 0.6 |
| Savings | 24,403 | 25,393 | 24,047 | -3.9 | -0.5 |
| **Savings and Loan Associations ($000,000)** | | | | | |
| Assets | 10,519 | 9,900 | 11,048 | 6.2 | 3.2 |
| New Mortgage Loans Closed | 586 | 851 | 41 | -31.1 | 0.9 |
| **Employment** | | | | | |
| Total Labor Force (000)[d] | 1,518.2 | 1,562.8 | 1,519.2 | -2.9 | 0.7 |
| Total Employment (000) | 1,419.5 | 1,448.6 | 1,425.3 | -2.0 | 0.9 |
| Unemployment Rate (%) | 6.5 | 7.5 | 6.2 | — | — |
| **General Business Index** | 94.7 | 94.0 | 95.3 | 0.8 | 0.5 |

Note: Includes revisions.

[a] 10 months and October data.

[b] Sales of larger privately owned utility companies.

[c] Total deposits of all depository institutions.

[d] Civilian Labor Force.

## RETAIL TRADE IN SELECTED CITIES
($000)

| City | Nov. '88<br>Adjusted | Nov. '88<br>Unadjusted | Adjusted<br>'88/'87<br>11 Mos. | Adjusted<br>1988<br>Nov./Oct. | City | Nov. '88<br>Adjusted | Nov. '88<br>Unadjusted | Adjusted<br>'88/'87<br>11 Mos. | Adjusted<br>1988<br>Nov./Oct. |
|---|---|---|---|---|---|---|---|---|---|
| Ada | 14,100 | 13,427 | 5.0 | -6.4 | McAlester | 9,094 | 9,225 | 8.9 | -12.2 |
| Altus | 11,394 | 11,417 | 5.7 | -12.4 | Miami | 11,042 | 10,666 | 4.8 | -3.4 |
| Alva | 3,543 | 3,565 | 7.2 | -14.5 | Midwest City | 32,906 | 33,938 | 6.8 | -8.3 |
| Anadarko | 4,902 | 4,683 | 7.7 | -5.0 | Moore | 12,177 | 12,307 | 0.7 | -3.2 |
| Ardmore | 18,955 | 18,154 | 7.3 | -5.9 | Muskogee | 19,585 | 19,004 | 3.8 | -38.3 |
| Bartlesville | 18,500 | 18,623 | 5.2 | -2.0 | Norman | 56,195 | 55,960 | 12.3 | -11.6 |
| Blackwell | 2,957 | 2,902 | 17.3 | -13.8 | Oklahoma City | 252,556 | 260,169 | 6.2 | -13.8 |
| Broken Arrow | 17,912 | 18,019 | 12.4 | -12.4 | Okmulgee | 4,685 | 4,737 | 4.2 | -13.9 |
| Chickasha | 8,562 | 8,500 | 8.8 | -11.7 | Pauls Valley | 4,080 | 3,936 | 12.4 | -7.5 |
| Clinton | 5,759 | 5,732 | 13.3 | -15.1 | Pawhuska | 1,768 | 1,702 | 5.7 | 2.1 |
| Cushing | 5,627 | 5,558 | 6.1 | 0.2 | Ponca City | 16,075 | 15,892 | 10.6 | -4.9 |
| Del City | 10,539 | 9,926 | 0.8 | -8.3 | Poteau | 4,141 | 4,322 | 12.4 | -7.9 |
| Duncan | 12,563 | 12,957 | 17.1 | -11.8 | Sand Springs | 8,202 | 8,049 | 5.0 | -4.2 |
| Durant | 9,799 | 9,592 | 8.5 | -12.8 | Sapulpa | 11,858 | 11,713 | 8.2 | -11.0 |
| Edmond | 23,218 | 22,825 | 14.5 | -4.0 | Seminole | 5,074 | 5,122 | 5.5 | -12.4 |
| Elk City | 7,312 | 7,225 | 11.3 | -10.0 | Shawnee | 24,641 | 25,130 | 9.9 | 18.4 |
| El Reno | 7,230 | 7,568 | 10.5 | -13.3 | Stillwater | 24,310 | 24,009 | 7.7 | -2.3 |
| Guthrie | 4,790 | 4,789 | 7.2 | -10.2 | Tahlequah | 7,128 | 6,913 | 1.8 | -8.3 |
| Guymon | 4,333 | 4,209 | 6.5 | -9.2 | Tulsa | 236,597 | 234,381 | 7.9 | -3.8 |
| Henryetta | 4,618 | 4,488 | 7.4 | -7.1 | Watonga | 1,762 | 1,753 | 4.8 | -14.3 |
| Hobart | 2,209 | 2,186 | 7.1 | -8.6 | Weatherford | 5,226 | 5,088 | 10.0 | -7.2 |
| Holdenville | 2,407 | 2,427 | 6.6 | -12.9 | Wewoka | 1,001 | 991 | 4.0 | -11.3 |
| Hugo | 2,562 | 2,512 | 10.8 | -18.2 | Woodward | 10,229 | 10,476 | 9.4 | -15.0 |
| Idabel | 3,195 | 3,281 | 2.5 | -10.5 | | | | | |
| **Lawton** | **45,099** | **45,001** | **4.3** | **-6.1** | **Total** | **1,012,417** | **1,015,049** | **7.5** | **-9.2** |

## RETAIL TRADE IN METRO AREAS AND STATE
($000)

| | | | | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | 11 Mos. '88 | 11 Mos. '87 | Nov. '88 | | 11 Mos. '88/'87 | Nov./Oct. '88 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| **OKLAHOMA CITY MSA** | | | | | | | |
| Food | 2,142,337 | 2,082,390 | 203,013 | 192,648 | 2.9 | -3.0 | -1.9 |
| Apparel | 157,765 | 166,637 | 13,989 | 14,776 | -5.3 | -0.7 | 8.4 |
| General Merchandise | 699,996 | 653,188 | 67,060 | 74,290 | 7.2 | 2.3 | 22.5 |
| Furniture | 226,982 | 232,166 | 20,785 | 21,124 | -2.2 | -12.1 | -7.3 |
| Lumber | 164,643 | 154,547 | 16,481 | 15,404 | 6.5 | 7.5 | -1.9 |
| Auto Dealers | 1,721,369 | 1,413,502 | 112,105 | 118,434 | 21.8 | -28.5 | -28.6 |
| Service Stations | 185,381 | 189,797 | 16,598 | 15,584 | -2.3 | 3.8 | -3.2 |
| All Other | 702,184 | 671,969 | 67,021 | 69,426 | 4.5 | 6.8 | 17.0 |
| Total | 6,000,657 | 5,564,196 | 517,052 | 521,686 | 7.8 | -8.2 | -5.2 |
| **TULSA MSA** | | | | | | | |
| Food | 1,249,804 | 1,217,027 | 117,262 | 109,614 | 2.7 | -1.3 | -6.3 |
| Apparel | 143,549 | 154,013 | 12,393 | 13,490 | -6.8 | -2.1 | 13.0 |
| General Merchandise | 611,830 | 539,319 | 62,494 | 65,897 | 13.4 | 8.5 | 21.5 |
| Furniture | 138,880 | 129,106 | 11,236 | 11,475 | 7.6 | -2.0 | 3.1 |
| Lumber | 125,459 | 127,570 | 12,391 | 12,329 | -1.7 | -0.8 | -2.2 |
| Auto Dealers | 1,001,568 | 822,439 | 65,229 | 68,911 | 21.8 | -28.5 | -28.6 |
| Service Stations | 152,305 | 155,921 | 13,636 | 12,804 | -2.3 | 3.8 | -3.1 |
| All Other | 128,501 | 145,142 | 10,333 | 11,356 | -11.5 | -10.0 | 34.0 |
| Total | 3,551,896 | 3,290,537 | 304,974 | 305,876 | 7.9 | -7.3 | -5.9 |
| **ENID MSA** | | | | | | | |
| Food | 103,026 | 103,277 | 9,560 | 9,281 | -0.2 | -1.4 | -4.9 |
| Apparel | 14,918 | 16,593 | 1,454 | 1,404 | -10.1 | 14.0 | 17.8 |
| General Merchandise | 46,910 | 44,624 | 4,503 | 4,900 | 5.1 | 3.6 | 17.0 |
| Furniture | 11,453 | 10,993 | 1,020 | 1,059 | 4.2 | 1.9 | 8.4 |
| Lumber | 14,311 | 14,694 | 1,154 | 1,276 | -2.6 | -9.7 | -14.9 |
| Auto Dealers | 98,520 | 80,901 | 6,416 | 6,778 | 21.8 | -28.5 | -28.6 |
| Service Stations | 13,660 | 13,991 | 1,223 | 1,148 | -2.4 | 3.8 | -3.1 |
| All Other | 32,696 | 32,873 | 2,972 | 2,794 | -0.5 | -11.0 | -4.2 |
| Total | 335,494 | 317,946 | 28,302 | 28,640 | 5.5 | -9.0 | -8.2 |
| **LAWTON MSA** | | | | | | | |
| Food | 174,157 | 175,481 | 15,333 | 14,513 | -0.8 | -5.7 | -10.3 |
| Apparel | 19,779 | 19,950 | 1,787 | 1,710 | -0.9 | -0.6 | 2.0 |
| General Merchandise | 137,719 | 128,897 | 13,048 | 14,105 | 6.8 | -0.8 | 20.0 |
| Furniture | 26,479 | 24,916 | 2,768 | 2,951 | 6.3 | 20.7 | 40.8 |
| Lumber | 15,431 | 19,152 | 1,175 | 1,229 | -19.4 | 2.7 | 5.8 |
| Auto Dealers | 131,289 | 107,812 | 8,550 | 9,033 | 21.8 | -28.5 | -28.6 |
| Service Stations | 9,328 | 9,552 | 835 | 784 | -2.3 | 3.7 | -3.2 |
| All Other | 33,555 | 39,709 | 2,408 | 2,891 | -15.5 | -24.0 | -0.6 |
| Total | 547,737 | 525,469 | 45,904 | 47,216 | 4.2 | -9.2 | -4.1 |
| **MUSKOGEE AREA** | | | | | | | |
| Food | 121,349 | 122,676 | 9,661 | 8,656 | -1.1 | -35.3 | -39.2 |
| Apparel | 19,830 | 18,052 | 2,022 | 1,944 | 9.8 | 12.5 | 17.2 |
| General Merchandise | 43,408 | 38,791 | 4,162 | 4,259 | 11.9 | 7.4 | 13.4 |
| Furniture | 10,963 | 12,961 | 1,140 | 1,116 | -15.4 | 27.8 | 18.7 |
| Lumber | 4,078 | 4,672 | 424 | 369 | -12.7 | 9.6 | -15.6 |
| Auto Dealers | 82,806 | 68,007 | 5,392 | 5,697 | 21.8 | -28.5 | -28.6 |
| Service Stations | 11,938 | 12,244 | 1,068 | 1,003 | -2.5 | 3.7 | -3.2 |
| All Other | 30,783 | 32,878 | 3,650 | 3,089 | -6.4 | 139.7 | 27.2 |
| Total | 325,155 | 310,281 | 27,519 | 26,133 | 4.8 | -14.0 | -19.5 |
| **STATE**[a] | | | | | | | |
| **Durable Goods** | 5,997,042 | 5,177,548 | 444,705 | 449,740 | 15.8 | -18.1 | -21.0 |
| Auto Dealers | 4,300,817 | 3,531,848 | 280,095 | 295,908 | 21.8 | -28.5 | -28.6 |
| Accessory Dealers | 304,407 | 300,955 | 28,764 | 26,915 | 1.1 | 5.3 | 0.5 |
| Total Automotive | 4,605,224 | 3,832,803 | 308,859 | 322,823 | 20.2 | -26.3 | -26.8 |
| Furniture | 314,313 | 295,119 | 28,227 | 28,770 | 6.5 | -3.1 | -2.7 |
| Household Appliances | 213,132 | 209,379 | 20,209 | 19,903 | 1.8 | 12.0 | 8.1 |
| Total Furniture and Appliances | 527,445 | 504,498 | 48,436 | 48,673 | 4.5 | 2.7 | 1.5 |
| Lumber and Building Materials | 513,183 | 512,519 | 49,869 | 48,608 | 0.1 | 4.6 | -3.6 |
| Hardware Stores | 61,028 | 57,581 | 5,786 | 5,547 | 6.0 | 4.4 | 5.3 |
| Total Lumber, Building Materials & Hardware | 574,211 | 570,100 | 55,655 | 54,155 | 0.7 | 4.6 | -2.8 |
| **Nondurable Goods** | 9,873,175 | 10,026,065 | 926,212 | 918,105 | -1.5 | 0.6 | 3.5 |
| Apparel | 545,948 | 570,911 | 48,697 | 50,316 | -4.4 | -0.5 | 7.2 |
| Drug Stores | 461,261 | 496,427 | 47,911 | 47,875 | -7.1 | 17.6 | 16.0 |
| Eating and Drinking Places | 1,735,210 | 1,734,701 | 163,135 | 151,510 | 0.0 | 0.2 | -7.2 |
| Food Group | 4,034,935 | 4,168,090 | 381,284 | 364,264 | -3.2 | -1.3 | -0.4 |
| Service Stations | 608,726 | 623,235 | 54,507 | 51,176 | -2.3 | 3.8 | -3.1 |
| General Merchandise Group | 1,811,116 | 1,736,332 | 169,350 | 193,166 | 4.3 | 2.4 | 20.7 |
| **Total Retail Trade** | 15,870,217 | 15,203,613 | 1,370,917 | 1,367,845 | 4.4 | -6.4 | -6.1 |

[a] Total includes data for categories not shown in the table.

## ENID AND LAWTON MSAs
## MUSKOGEE MA

| Category | 11 Mos. '88 | 11 Mos. '87 | Nov. '88 | Percentage Change 11 Mos. '88/'87 | Percentage Change Nov./Oct. '88 |
|---|---|---|---|---|---|
| **ENID MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 29,402 | 30,409 | 28,925 | -3.3 | 0.4 |
| Total Employment | 27,820 | 28,227 | 27,500 | -1.4 | 0.8 |
| Unemployment Rate (%) | 5.4 | 7.0 | 4.9 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 1,205 | 1,921 | 420 | -37.3 | 95.3 |
| Number of Units | 11 | 20 | 3 | -45.0 | 50.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Number of Units | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 1,032 | 487 | 213 | 112.1 | E |
| Industrial ($000) | 0 | 1,194 | 0 | — | 0.0 |
| Institutional ($000) | 300 | 2,052 | 0 | -85.4 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 2,692 | 772 | 0 | 248.6 | 0.0 |
| All Other Nonbuilding ($000) | 152 | 330 | 0 | -53.9 | 0.0 |
| Total Construction ($000) | 5,381 | 6,756 | 633 | -20.4 | 176.4 |
| **LAWTON MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 49,291 | 49,723 | 48,650 | -0.9 | 1.0 |
| Total Employment | 46,548 | 47,266 | 45,950 | -1.5 | 1.4 |
| Unemployment Rate (%) | 5.5 | 4.9 | 5.5 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 11,560 | 17,313 | 579 | -33.2 | 5.8 |
| Number of Units | 147 | 266 | 6 | -44.7 | 0.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 180 | 400 | 0 | -55.0 | 0.0 |
| Number of Units | 6 | 16 | 0 | -62.5 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 4,928 | 3,613 | 766 | 36.4 | 19.7 |
| Industrial ($000) | 830 | 320 | 0 | 159.4 | 0.0 |
| Institutional ($000) | 1,390 | 1,400 | 0 | -0.7 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 7,962 | 1,370 | 0 | 481.3 | 0.0 |
| All Other Nonbuilding ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Total Construction ($000) | 26,850 | 24,416 | 1,345 | 10.0 | 13.3 |
| **MUSKOGEE MA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 31,548 | 32,686 | 31,525 | -3.5 | 1.0 |
| Total Employment | 28,698 | 30,007 | 28,800 | -4.4 | 0.8 |
| Unemployment Rate (%) | 9.1 | 8.7 | 8.6 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 216 | 1,414 | 0 | -84.8 | 0.0 |
| Number of Units | 2 | 15 | 0 | -86.7 | 0.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 75 | 0 | — | 0.0 |
| Number of Units | 0 | 2 | 0 | — | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 400 | 6,660 | 0 | -94.0 | 0.0 |
| Industrial ($000) | 0 | 20 | 0 | — | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 3,847 | 967 | 687 | 298.0 | — |
| All Other Nonbuilding ($000) | 5 | 0 | 0 | — | 0.0 |
| Total Construction ($000) | 4,468 | 9,136 | 687 | -51.1 | — |

Note: Includes revisions.

[a] Civilian Labor Force.

E = Exceeds 600 percent.

Sources for all tables: Local utilities companies; 10th Federal Reserve Bank, Kansas City; Federal Home Loan Bank of Topeka; Oklahoma Employment Security Commission; United States Department of Commerce, Construction Statistics Division; Oklahoma Department of Transportation. Oklahoma Corporation Commission; Center for Economic and Management Research, College of Business Administration, The University of Oklahoma. The data for all tables were compiled by Marjorie E. Earley, Statistician for CEMR and Brian M. Hickey, Data Analyst.

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**University of Oklahoma**
**Norman, Oklahoma 73069**

## OKLAHOMA CITY AND TULSA MSAs

| | | | | Percentage Change | |
|---|---|---|---|---|---|
| Category | 11 Mos. '88 | 11 Mos. '87 | Nov. '88 | 11 Mos.'88/'87 | Nov./Oct. '88 |
| **OKLAHOMA CITY MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 496,045 | 509,309 | 492,200 | -2.6 | 0.5 |
| Total Employment | 469,354 | 478,354 | 467,300 | -1.9 | 0.9 |
| Unemployment Rate (%) | 5.4 | 6.1 | 5.1 | — | — |
| **Mortgage Loans Closed ($000,000)** | 102.0[b] | 192.0[b] | 6.7[b] | -46.9[b] | -43.7[b] |
| **Bank Deposits ($000,000)[c]** | | | | | |
| Demand Deposits | 824 | 912 | 857 | -9.6 | 4.8 |
| Time and Savings Deposits | 1,148 | 1,532 | 1,202 | -25.1 | 0.1 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 106,703 | 122,283 | 9,593 | -12.7 | -1.5 |
| Number of Units | 1,470 | 1,925 | 110 | -23.6 | -23.1 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 1,374 | 4,579 | 0 | -70.0 | 0.0 |
| Number of Units | 75 | 135 | 0 | -44.4 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 65,247 | 111,370 | 1,317 | -41.4 | -80.2 |
| Industrial ($000) | 5,539 | 2,988 | 70 | 85.4 | -59.3 |
| Institutional ($000) | 15,874 | 17,940 | 0 | -11.5 | — |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 56,684 | 61,418 | 1,661 | -7.7 | -22.0 |
| All Other Nonbuilding ($000) | 1,992 | 3,404 | 57 | -41.5 | -56.9 |
| Total Construction ($000) | 253,413 | 323,982 | 12,699 | -21.8 | -40.7 |
| **General Business Index** | 92.8 | 89.4 | 96.1 | 3.8 | 2.0 |
| **TULSA MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 339,536 | 348,809 | 338,900 | -2.7 | 0.1 |
| Total Employment | 315,327 | 319,600 | 316,200 | -1.3 | 0.2 |
| Unemployment Rate (%) | 7.1 | 8.4 | 6.7 | — | — |
| **Mortgage Loans Closed ($000,000)** | 199.8[b] | 231.8[b] | 12.3[b] | -13.8[b] | -44.4[b] |
| **Bank Deposits ($000,000)[c]** | | | | | |
| Demand Deposits | 884 | 849 | 926 | 4.1 | 38.4 |
| Time and Savings Deposits | 2,168 | 2,298 | 2,154 | -5.7 | -0.9 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 98,636 | 114,207 | 7,456 | -13.6 | -6.9 |
| Number of Units | 1,302 | 1,630 | 103 | -20.1 | -9.6 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 1,378 | 11,095 | 0 | -87.6 | 0.0 |
| Number of Units | 58 | 516 | 0 | -88.8 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 57,882 | 19,569 | 960 | 195.8 | -91.2 |
| Industrial ($000) | 17,138 | 11,761 | 1,667 | 45.7 | 268.0 |
| Institutional ($000) | 18,227 | 16,104 | 4,094 | 13.2 | 18.9 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 43,112 | 34,680 | 7,976 | 24.3 | 249.4 |
| All Other Nonbuilding ($000) | 3,455 | 3,866 | 232 | -10.6 | 103.0 |
| Total Construction ($000) | 239,827 | 211,281 | 22,385 | 13.5 | -11.4 |
| **General Business Index** | 88.6 | 87.3 | 90.4 | 1.5 | 0.5 |

Note: Includes revisions.

[a] Civilian Labor Force.

[b] By Savings and Loan Associations, 10 months and October data.

[c] Total deposits in large commercial banks (accounted for 36 percent of all commercial bank deposits as of December 31, 1987 for Oklahoma City and 50 percent of all commercial bank deposits as of December 31, 1987 for Tulsa).

## CONSTRUCTION, STATE

| | | | | Percentage Change | |
|---|---|---|---|---|---|
| Category | 11 Mos. '88 | 11 Mos. '87 | Nov. '88 | 11 Mos. '88/'87 | Nov./Oct. '88 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 241,425 | 279,664 | 20,053 | -13.7 | -2.4 |
| Number of Units | 3,232 | 4,137 | 252 | -21.9 | -13.7 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 5,651 | 18,996 | 0 | -70.3 | 0.0 |
| Number of Units | 277 | 784 | 0 | -64.7 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 143,339 | 158,553 | 5,192 | -9.6 | -72.8 |
| Industrial ($000) | 31,503 | 17,412 | 1,737 | 80.9 | -56.0 |
| Institutional ($000) | 44,220 | 45,589 | 5,835 | -3.0 | -17.9 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 260,311 | 247,683 | 17,575 | 5.1 | 113.2 |
| All Other Nonbuilding ($000) | 5,930 | 7,923 | 312 | -25.2 | 20.2 |
| Total Construction ($000) | 732,379 | 775,821 | 50,704 | -5.6 | -14.4 |

**Note: Includes revisions.**

4/13/89 U8130-1 A

# OKLAHOMA BUSINESS BULLETIN

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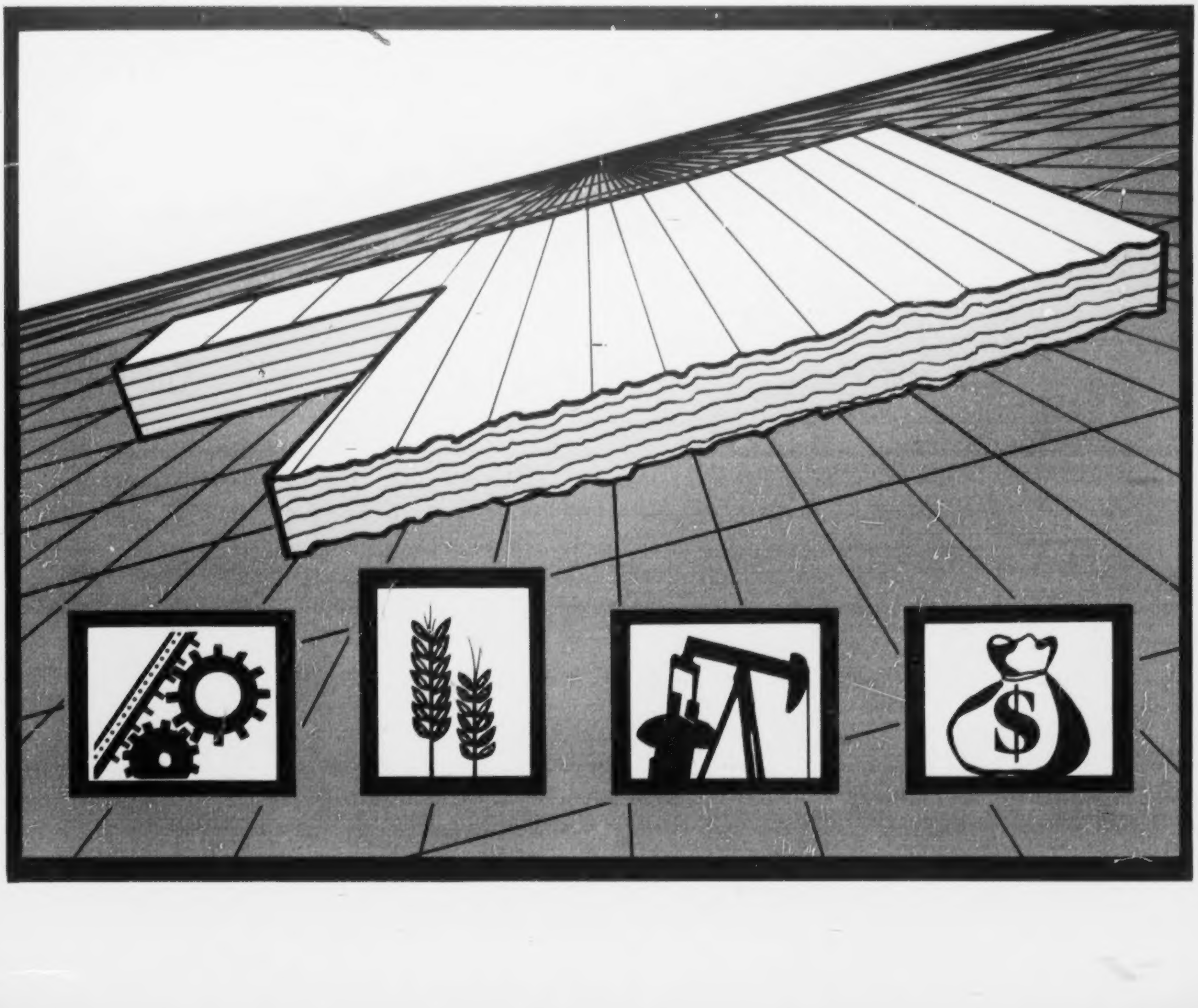

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## SUMMARY OF INDICATORS

| Category | 12 Mos. '88 | 12 Mos. '87 | Dec. '88 | Percentage Change 12 Mos. '88/'87 | Percentage Change Dec./Nov. '88 |
|---|---|---|---|---|---|
| **Personal Income (Monthly Average)** | | | | | |
| Unadjusted ($000,000) | 3,654 | 3,422 | 3,774 | 6.8 | 0.9 |
| Adjusted for CPI ($000,000) | 3,090 | 3,012 | 3,132 | 2.6 | 0.7 |
| **Crude Oil Production (000 bbl)** | 118,526 | 123,328 | 9,751 | -3.9 | 6.6 |
| **Natural Gas Production (000 mcf)**[a] | 2,032,322 | 2,028,043 | 146,391 | 0.2 | -15.4 |
| **Industrial Power Sales (000,000 Kwh)**[b] | 8,543 | 8,216 | 698 | 4.0 | -2.2 |
| **Total Bank Deposits (Monthly Average) ($000,000)**[c] | | | | | |
| Demand | 7,556 | 7,518 | 7,614 | 0.5 | 1.7 |
| Savings | 24,354 | 25,324 | 23,811 | -3.8 | -1.0 |
| **Savings and Loan Associations ($000,000)** | | | | | |
| Assets | 10,527 | 9,847 | 11,052 | 6.9 | 4.2 |
| Mortgage Loans Closed | 640 | 948 | 54 | -32.5 | 30.3 |
| **General Business Index** | 94.9 | 94.1 | 96.3 | 0.9 | 1.0 |

Note: Includes revisions.

[a] Natural gas includes casinghead gas.

[b] Sales of larger privately owned utility companies.

[c] Total deposits of all depository institutions.

## SELECTED ECONOMIC INDICATORS

| Category | 12 Mos. '88 | 12 Mos. '87 | Dec. '88 | Percentage Change 12 Mos. '88/'87 | Percentage Change Dec./Nov. '88 |
|---|---|---|---|---|---|
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 258,482 | 304,678 | 15,795 | -15.2 | -23.4 |
| Number of Units | 3,476 | 4,659 | 216 | -25.4 | -17.9 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 5,651 | 21,883 | 0 | -74.2 | 0.0 |
| Number of Units | 277 | 924 | 0 | -70.0 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 151,077 | 172,375 | 5,942 | -12.4 | -14.6 |
| Industrial ($000) | 33,552 | 19,606 | 2,049 | 71.1 | 18.0 |
| Institutional ($000) | 50,636 | 48,212 | 5,450 | 5.0 | -7.9 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 280,383 | 266,459 | 20,072 | 5.2 | 14.2 |
| All Other Nonbuilding ($000) | 6,133 | 8,207 | 138 | -25.3 | -63.5 |
| Total Construction ($000) | 785,914 | 841,419 | 49,447 | -6.6 | -7.0 |
| **EMPLOYMENT TRENDS** | | | | | |
| Total Labor Force (000)[a] | NA | NA | 1,528.5 | NA | 0.1 |
| Total Employment (000) | NA | NA | 1,443.0 | NA | 0.0 |
| Manufacturing (000) | 162.9 | 156.8 | 165.6 | 3.9 | 0.2 |
| Mining (000) | 44.9 | 46.0 | 44.1 | -2.4 | 0.2 |
| Government (000) | 247.5 | 245.3 | 251.0 | 0.1 | 0.9 |
| Contract Construction (000) | 34.5 | 34.5 | 32.3 | 0.0 | -3.6 |
| Services (000) | 248.0 | 232.6 | 250.3 | 6.6 | -0.4 |
| Retail Trade (000) | 215.0 | 211.5 | 222.6 | 1.7 | 1.6 |
| Unemployment Rate (%) | NA | NA | 5.6 | — | — |
| **Average Weekly Hours** | | | | | |
| Manufacturing (Per Worker) | 41.1 | 41.2 | 41.9 | -0.2 | 0.5 |
| **Average Weekly Earnings** | | | | | |
| Manufacturing ($ Per Worker) | 427.13 | 417.21 | 441.63 | 2.4 | -1.0 |
| Contract Construction ($ Per Worker) | 430.20 | 428.99 | 433.55 | 0.3 | 1.2 |
| Retail Trade ($ Per Worker)[b] | 191.47 | 191.64 | 197.09 | 0.0 | 4.4 |

**Note: Includes revisions in some previous months. O.E.S.C. has not yet released revised data for Labor Force. Employment and unemployment rate prior to November, 1988.**

**[a] Civilian Labor Force.**

**[b] Excluding eating and drinking places.**

**NA = Not Available.**

## RETAIL TRADE IN METRO AREAS AND STATE
($000)

| | | | | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | 12 Mos. '88 | 12 Mos. '87 | Dec. '88 | | 12 Mos. '88/'87 | Dec./Nov. '88 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| **OKLAHOMA CITY MSA** | | | | | | | |
| Food | 2,353,466 | 2,269,751 | 210,672 | 216,556 | 3.7 | 3.6 | 12.4 |
| Apparel | 173,212 | 182,792 | 14,690 | 26,304 | -5.2 | 3.9 | 78.0 |
| General Merchandise | 771,270 | 716,235 | 69,449 | 124,985 | 7.7 | 3.7 | 68.2 |
| Furniture | 262,630 | 252,607 | 34,963 | 45,566 | 4.0 | 75.0 | 115.7 |
| Lumber | 182,327 | 169,056 | 17,371 | 13,329 | 7.9 | 3.9 | -13.5 |
| Auto Dealers | 1,874,854 | 1,537,573 | 152,904 | 145,177 | 21.9 | 37.2 | 22.6 |
| Service Stations | 204,459 | 205,644 | 18,726 | 18,367 | -0.6 | 10.4 | 17.9 |
| All Other | 777,127 | 743,863 | 70,758 | 109,676 | 4.5 | -1.5 | 58.0 |
| Total | 6,599,345 | 6,077,521 | 589,533 | 699,960 | 8.6 | 13.1 | 34.2 |
| **TULSA MSA** | | | | | | | |
| Food | 1,368,949 | 1,326,089 | 118,872 | 127,130 | 3.2 | 1.4 | 16.0 |
| Apparel | 157,473 | 166,557 | 13,436 | 24,302 | -5.5 | 7.9 | 80.1 |
| General Merchandise | 682,052 | 595,373 | 66,236 | 113,185 | 14.6 | 4.5 | 71.8 |
| Furniture | 155,243 | 140,197 | 13,851 | 19,969 | 10.7 | 23.4 | 74.0 |
| Lumber | 138,649 | 139,178 | 12,941 | 11,703 | -0.4 | 4.0 | -5.1 |
| Auto Dealers | 1,090,872 | 894,628 | 88,967 | 84,471 | 21.9 | 37.2 | 22.6 |
| Service Stations | 167,979 | 168,939 | 15,385 | 15,090 | -0.6 | 10.4 | 17.9 |
| All Other | 147,912 | 160,110 | 15,548 | 20,091 | -7.6 | 44.1 | 76.9 |
| Total | 3,909,129 | 3,591,071 | 345,236 | 415,941 | 8.9 | 12.7 | 36.0 |
| **ENID MSA** | | | | | | | |
| Food | 113,139 | 112,475 | 10,039 | 10,625 | 0.6 | 4.6 | 14.5 |
| Apparel | 16,347 | 17,960 | 1,421 | 2,116 | -9.0 | -2.3 | 50.7 |
| General Merchandise | 52,002 | 48,985 | 4,758 | 8,805 | 6.2 | 4.4 | 79.7 |
| Furniture | 13,716 | 11,997 | 2,184 | 2,722 | 14.3 | 97.3 | 157.0 |
| Lumber | 16,320 | 15,784 | 1,891 | 1,442 | 3.4 | 59.6 | 13.0 |
| Auto Dealers | 107,305 | 88,002 | 8,751 | 8,309 | 21.9 | 37.2 | 22.6 |
| Service Stations | 15,066 | 15,159 | 1,380 | 1,353 | -0.6 | 10.5 | 17.9 |
| All Other | 35,279 | 36,189 | 2,619 | 4,777 | -2.5 | -8.5 | 71.0 |
| Total | 369,174 | 346,551 | 33,043 | 40,149 | 6.5 | 16.4 | 40.2 |
| **LAWTON MSA** | | | | | | | |
| Food | 191,322 | 191,668 | 16,993 | 16,848 | -0.2 | 10.5 | 16.1 |
| Apparel | 21,719 | 21,684 | 1,919 | 3,081 | 0.2 | 7.0 | 80.2 |
| General Merchandise | 151,311 | 141,153 | 12,954 | 22,554 | 7.2 | -0.6 | 59.9 |
| Furniture | 28,970 | 27,037 | 2,565 | 2,992 | 7.1 | -6.4 | -1.0 |
| Lumber | 16,911 | 20,872 | 1,422 | 1,132 | -19.0 | 18.8 | -7.9 |
| Auto Dealers | 142,996 | 117,274 | 11,662 | 11,073 | 21.9 | 37.2 | 22.6 |
| Service Stations | 10,287 | 10,349 | 942 | 924 | -0.6 | 10.4 | 17.9 |
| All Other | 38,857 | 45,192 | 3,428 | 4,669 | -14.0 | 15.0 | 61.5 |
| Total | 602,373 | 575,229 | 51,885 | 63,203 | 4.7 | 11.6 | 33.9 |
| **MUSKOGEE AREA** | | | | | | | |
| Food | 133,806 | 133,694 | 12,417 | 12,172 | 0.1 | 28.7 | 40.6 |
| Apparel | 22,124 | 19,800 | 2,211 | 3,602 | 11.7 | 7.3 | 85.3 |
| General Merchandise | 47,965 | 42,952 | 4,261 | 7,806 | 11.7 | 0.8 | 83.3 |
| Furniture | 12,707 | 13,982 | 1,690 | 2,108 | -9.1 | 45.4 | 88.9 |
| Lumber | 4,441 | 5,023 | 370 | 300 | -11.6 | -11.7 | -18.7 |
| Auto Dealers | 90,188 | 73,977 | 7,355 | 6,983 | 21.9 | 37.2 | 22.6 |
| Service Stations | 13,166 | 13,265 | 1,204 | 1,182 | -0.7 | 10.4 | 17.8 |
| All Other | 33,624 | 36,372 | 2,706 | 3,910 | -7.6 | -28.5 | 26.6 |
| Total | 358,021 | 339,065 | 32,214 | 38,063 | 5.6 | 16.1 | 45.7 |
| **STATE**[a] | | | | | | | |
| **Durable Goods** | 6,541,480 | 5,626,608 | 537,868 | 546,635 | 16.3 | 24.4 | 21.5 |
| Auto Dealers | 4,684,302 | 3,841,836 | 382,030 | 362,725 | 21.9 | 37.2 | 22.6 |
| Accessory Dealers | 330,327 | 327,485 | 26,311 | 26,648 | 0.9 | -8.0 | -1.0 |
| Total Automotive | 5,014,629 | 4,169,321 | 408,341 | 389,373 | 20.3 | 33.0 | 20.6 |
| Furniture | 350,353 | 321,654 | 35,570 | 40,744 | 8.9 | 26.5 | 41.6 |
| Household Appliances | 235,098 | 229,130 | 20,734 | 26,268 | 2.6 | 3.0 | 32.0 |
| Total Furniture and Appliances | 585,451 | 550,784 | 56,304 | 67,012 | 6.3 | 16.6 | 37.7 |
| Lumber and Building Materials | 566,784 | 558,761 | 52,865 | 43,806 | 1.4 | 4.4 | -9.9 |
| Hardware Stores | 67,349 | 63,148 | 6,189 | 6,854 | 6.7 | 4.6 | 23.6 |
| Total Lumber, Building Materials & Hardware | 634,133 | 621,909 | 59,054 | 50,660 | 2.0 | 4.4 | -6.5 |
| **Nondurable Goods** | 10,832,051 | 10,883,405 | 958,705 | 1,171,779 | -0.5 | 3.3 | 27.6 |
| Apparel | 600,214 | 620,388 | 53,059 | 90,392 | -3.3 | 8.4 | 79.6 |
| Drug Stores | 505,794 | 537,742 | 44,480 | 57,742 | -5.9 | -7.3 | 20.6 |
| Eating and Drinking Places | 1,911,967 | 1,883,846 | 175,488 | 167,494 | 1.5 | 7.5 | 10.5 |
| Food Group | 4,420,438 | 4,520,429 | 386,841 | 404,187 | -2.2 | 1.5 | 11.0 |
| Service Stations | 671,375 | 675,268 | 61,495 | 60,314 | -0.6 | 10.4 | 17.9 |
| General Merchandise Group | 1,987,739 | 1,895,349 | 175,557 | 312,021 | 4.9 | 2.9 | 61.5 |
| **Total Retail Trade** | 17,373,531 | 16,510,013 | 1,496,573 | 1,718,414 | 5.2 | 10.0 | 25.6 |

[a] Total includes data for categories not shown in the table.

## RETAIL TRADE IN SELECTED CITIES
($000)

| | 12 Mos. '88 | 12 Mos. '87 | Dec. '88 | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | | | | | 12 Mos. '88/'87 | Dec./Nov. '88 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| Ada | 169,111 | 159,170 | 15,286 | 18,417 | 6.2 | 9.1 | 37.2 |
| Altus | 149,925 | 141,266 | 12,526 | 14,804 | 6.1 | 7.2 | 29.7 |
| Alva | 46,400 | 43,105 | 3,741 | 4,351 | 7.6 | 3.6 | 22.0 |
| Anadarko | 59,121 | 54,481 | 5,237 | 6,151 | 8.5 | 6.1 | 31.3 |
| Ardmore | 232,980 | 216,633 | 20,014 | 24,579 | 7.5 | 5.4 | 35.4 |
| Bartlesville | 233,629 | 220,092 | 20,132 | 25,071 | 6.2 | 7.9 | 34.6 |
| Blackwell | 40,874 | 34,833 | 3,369 | 3,870 | 17.3 | 16.7 | 33.4 |
| Broken Arrow | 235,377 | 208,442 | 21,148 | 22,993 | 12.9 | 18.6 | 27.6 |
| Chickasha | 112,853 | 103,675 | 9,275 | 10,660 | 8.9 | 10.0 | 25.4 |
| Clinton | 79,431 | 69,727 | 6,700 | 7,392 | 13.9 | 18.8 | 29.0 |
| Cushing | 65,930 | 62,190 | 5,469 | 6,414 | 6.0 | -2.7 | 15.4 |
| Del City | 131,979 | 129,342 | 11,796 | 11,914 | 2.0 | 11.1 | 20.0 |
| Duncan | 181,279 | 155,223 | 14,776 | 17,152 | 16.8 | 17.7 | 32.4 |
| Durant | 127,176 | 117,227 | 10,448 | 12,345 | 8.5 | 1.1 | 28.7 |
| Edmond | 295,812 | 253,528 | 24,869 | 28,543 | 16.7 | 7.3 | 25.1 |
| Elk City | 93,319 | 83,224 | 8,185 | 9,392 | 12.1 | 10.7 | 30.0 |
| El Reno | 96,087 | 85,837 | 8,633 | 9,554 | 11.9 | 19.4 | 26.2 |
| Guthrie | 62,799 | 58,318 | 5,251 | 5,566 | 7.7 | 10.5 | 16.2 |
| Guymon | 54,273 | 50,085 | 4,759 | 5,838 | 8.4 | 9.7 | 38.7 |
| Henryetta | 57,748 | 53,796 | 4,760 | 5,619 | 7.3 | 2.7 | 25.2 |
| Hobart | 28,256 | 26,091 | 2,482 | 2,758 | 8.3 | 13.9 | 26.2 |
| Holdenville | 32,749 | 30,569 | 2,757 | 3,149 | 7.1 | 15.5 | 29.7 |
| Hugo | 34,015 | 31,160 | 2,732 | 3,155 | 9.2 | 2.1 | 25.6 |
| Idabel | 44,659 | 43,082 | 3,995 | 4,513 | 3.7 | 25.5 | 37.5 |
| Lawton | 573,652 | 547,563 | 49,647 | 60,374 | 4.8 | 8.7 | 34.2 |
| McAlester | 120,681 | 110,914 | 9,885 | 11,526 | 8.8 | 8.1 | 24.9 |
| Miami | 136,077 | 128,821 | 10,952 | 14,124 | 5.6 | -1.6 | 32.4 |
| Midwest City | 426,208 | 392,969 | 40,631 | 48,355 | 8.5 | 26.1 | 42.5 |
| Moore | 159,290 | 157,508 | 14,215 | 16,005 | 1.1 | 16.2 | 30.0 |
| Muskogee | 331,498 | 324,392 | 23,361 | 27,209 | 2.2 | 20.6 | 43.2 |
| Norman | 752,368 | 666,487 | 64,051 | 72,632 | 12.9 | 15.8 | 29.8 |
| Oklahoma City | 3,333,170 | 3,125,777 | 293,653 | 362,689 | 6.6 | 16.4 | 39.4 |
| Okmulgee | 62,904 | 59,780 | 5,454 | 5,973 | 5.2 | 16.2 | 26.1 |
| Pauls Valley | 50,829 | 44,931 | 4,164 | 4,878 | 13.1 | 2.0 | 23.9 |
| Pawhuska | 20,282 | 19,003 | 1,705 | 1,985 | 6.7 | -2.7 | 16.6 |
| Ponca City | 200,436 | 179,637 | 17,811 | 21,821 | 11.6 | 9.8 | 37.3 |
| Poteau | 55,868 | 49,657 | 4,626 | 5,310 | 12.5 | 10.9 | 22.9 |
| Sand Springs | 102,607 | 96,940 | 9,510 | 11,074 | 5.8 | 19.0 | 37.6 |
| Sapulpa | 153,256 | 141,261 | 12,806 | 14,592 | 8.5 | 9.7 | 24.6 |
| Seminole | 69,903 | 65,138 | 6,269 | 7,300 | 7.3 | 24.7 | 42.5 |
| Shawnee | 305,999 | 276,392 | 27,053 | 31,903 | 10.7 | 8.5 | 27.0 |
| Stillwater | 295,084 | 272,730 | 26,070 | 29,688 | 8.2 | 6.6 | 23.7 |
| Tahlequah | 90,312 | 87,709 | 8,050 | 8,749 | 3.0 | 13.7 | 26.6 |
| Tulsa | 2,971,538 | 2,727,394 | 273,728 | 329,939 | 9.0 | 18.2 | 40.8 |
| Watonga | 21,160 | 20,130 | 1,744 | 1,949 | 5.1 | -2.7 | 11.2 |
| Weatherford | 66,577 | 60,013 | 5,815 | 6,654 | 10.9 | 12.3 | 30.8 |
| Wewoka | 13,500 | 12,878 | 1,110 | 1,161 | 4.8 | 11.3 | 17.2 |
| Woodward | 137,419 | 124,651 | 11,984 | 13,676 | 10.2 | 16.9 | 30.5 |
| **Total Selected Cities** | 13,116,400 | 12,123,771 | 1,152,634 | 1,373,766 | 8.2 | 14.5 | 35.3 |

Sources for all tables: Local utilities companies; 10th Federal Reserve District Member Banks; Federal Home Loan Bank of Topeka; Oklahoma Employment Security Commission; United States Department of Commerce, Construction Statistics Division; Oklahoma Department of Transportation, *Progressive Report of the Transportation Director*; Center for Economic and Management Research, College of Business Administration, The University of Oklahoma. The data for all tables were compiled by Marjorie E. Earley, Statistician for CEMR and Brian Hickey, Research Assistant.

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### EQUAL OPPORTUNITY STATEMENT

This institution in compliance with Title VI and VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and other Federal laws and regulations does not discriminate on the basis of race, color, or national origin, sex, age, religion, handicap, or status as a veteran in any of its policies, practices or procedures. This includes but is not limited to admissions, employment, financial aid, and educational services.

## ENID AND LAWTON MSAs

| Category | 12 Mos. '88 | 12 Mos. '87 | Dec. '88 | Percentage Change 12 Mos. '88/'87 | Percentage Change Dec./Nov. '88 |
|---|---|---|---|---|---|
| **ENID MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | NA | NA | 28,325 | NA | 0.4 |
| Total Employment | NA | NA | 27,050 | NA | 0.4 |
| Unemployment Rate (%) | NA | NA | 4.5 | — | — |
| **Industrial Power Sales (000 Kwh)** | 460,854 | 458,055 | 39,600 | 0.6 | 8.1 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 1,205 | 2,318 | 0 | -48.0 | — |
| Number of Units | 11 | 24 | 0 | -54.2 | — |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Number of Units | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 1,052 | 493 | 20 | 113.5 | -90.7 |
| Industrial ($000) | 0 | 1,194 | 0 | — | 0.0 |
| Institutional ($000) | 300 | 2,052 | 0 | -85.4 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 2,692 | 772 | 0 | 248.6 | 0.0 |
| All Other Nonbuilding ($000) | 152 | 336 | 0 | -54.7 | — |
| Total Construction ($000) | 5,401 | 7,165 | 20 | -24.6 | -96.9 |
| **LAWTON MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | NA | NA | 48,650 | NA | 1.2 |
| Total Employment | NA | NA | 46,275 | NA | 1.8 |
| Unemployment Rate (%) | NA | NA | 4.9 | — | — |
| **Industrial Power Sales (000 Kwh)** | 200,704 | 196,066 | 15,716 | 2.4 | -9.5 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 12,026 | 18,305 | 466 | -34.3 | -19.5 |
| Number of Units | 152 | 286 | 5 | -46.9 | -16.7 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 180 | 740 | 0 | -75.7 | 0.0 |
| Number of Units | 6 | 40 | 0 | -85.0 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 5,143 | 3,960 | 215 | 29.9 | -71.9 |
| Industrial ($000) | 830 | 320 | 0 | 159.4 | 0.0 |
| Institutional ($000) | 4,390 | 1,435 | 3,000 | 205.9 | — |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 7,962 | 1,722 | 0 | 362.5 | 0.0 |
| All Other Nonbuilding ($000) | 0 | 8 | 0 | — | 0.0 |
| Total Construction ($000) | 30,531 | 26,489 | 3,681 | 15.3 | 173.7 |

Note: Includes revisions. [a]Civilian Labor Force. NA = Not Available.

## MUSKOGEE MA

| Category | 12 Mos. '88 | 12 Mos. '87 | Dec. '88 | Percentage Change 12 Mos. '88/'87 | Percentage Change Dec./Nov. '88 |
|---|---|---|---|---|---|
| **Employment (Number)** | | | | | |
| Labor Force[a] | NA | NA | 32,000 | NA | 0.5 |
| Total Employment | NA | NA | 29,475 | NA | 0.7 |
| Unemployment Rate (%) | NA | NA | 7.9 | — | — |
| **Industrial Power Sales (000 Kwh)** | 172,966 | 190,701 | 12,750 | -9.3 | -15.5 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 216 | 1,414 | 0 | -84.7 | 0.0 |
| Number of Units | 2 | 15 | 0 | -86.7 | 0.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 75 | 0 | — | 0.0 |
| Number of Units | 0 | 2 | 0 | — | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 400 | 6,660 | 0 | -94.0 | 0.0 |
| Industrial ($000) | 0 | 20 | 0 | — | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 4,181 | 967 | 334 | 332.6 | -51.4 |
| All Other Nonbuilding ($000) | 5 | 0 | 0 | — | 0.0 |
| **Total Construction ($000)** | 4,802 | 9,136 | 334 | -47.4 | -51.4 |

Note: Includes revisions. [a]Civilian Labor Force. NA = Not Available.

## TULSA MSA

| Category | 12 Mos. '88 | 12 Mos. '87 | Dec. '88 | Percentage Change<br>12 Mos. '88/'87 | Percentage Change<br>Dec./Nov. '88 |
|---|---|---|---|---|---|
| **Employment (Number)** | | | | | |
| Labor Force[a] | NA | NA | 340,700 | NA | 0.6 |
| Total Employment | NA | NA | 321,200 | NA | 0.8 |
| Manufacturing | 49,500 | 48,000 | 50,000 | 3.1 | -0.6 |
| Mining | 14,300 | 14,800 | 14,400 | -4.0 | 0.7 |
| Government | 36,800 | 35,700 | 36,300 | 3.1 | 0.0 |
| Wholesale and Retail Trade | 70,600 | 70,900 | 71,400 | -4.4 | 1.3 |
| Unemployment Rate (%) | NA | NA | 5.7 | — | — |
| **Average Weekly Earnings** | | | | | |
| Manufacturing ($ Per Worker) | 448.06 | 440.47 | 463.95 | 1.7 | 1.4 |
| **Industrial Power Sales (000 Kwh)** | 2,256,616 | 2,099,207 | 184,869 | 7.5 | -3.7 |
| **Mortgage Loans Closed ($000,000)**[b] | 234 | 263 | 21 | -11.0 | 69.0 |
| **Bank Deposits ($000,000)**[c] | | | | | |
| Demand Deposits | 888 | 853 | 953 | 4.1 | 1.0 |
| Time and Savings Deposits | 2,164 | 2,290 | 2,121 | -5.5 | -1.5 |
| **Air Transportation** | | | | | |
| Passengers Enplaning (Number) | 1,375,113 | 1,396,864 | 114,930 | -1.6 | -1.0 |
| Passengers Deplaning (Number) | 1,395,416 | 1,410,525 | 122,221 | -1.1 | 5.3 |
| Freight (Tons) | 22,365 | 16,391 | 1,981 | 36.4 | 3.5 |
| **Water Transportation** | | | | | |
| Tulsa Port of Catoosa | | | | | |
| Tons In | 493,805 | 537,318 | 40,397 | -8.1 | -9.1 |
| Tons Out | 1,205,227 | 1,274,220 | 165,386 | -5.4 | 35.7 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 106,129 | 120,769 | 6,595 | -12.1 | -17.2 |
| Number of Units | 1,417 | 1,730 | 93 | -18.1 | -17.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 1,378 | 11,169 | 0 | -87.7 | 0.0 |
| Number of Units | 58 | 518 | 0 | -88.8 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 59,163 | 26,026 | 1,273 | 127.3 | 32.6 |
| Industrial ($000) | 19,156 | 11,761 | 2,017 | 62.9 | 21.0 |
| Institutional ($000) | 20,343 | 16,678 | 1,150 | 22.0 | -72.4 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 57,009 | 34,680 | 13,898 | 64.4 | 74.2 |
| All Other Nonbuilding ($000) | 3,561 | 3,996 | 106 | -10.9 | -54.3 |
| Total Construction | 266,739 | 225,078 | 25,039 | 18.5 | 9.0 |
| **General Business Index** | 88.9 | 87.3 | 91.7 | 1.8 | 1.4 |

Note: Includes revisions.

[a] Civilian Labor Force.

[b] By Savings and Loan Associations.

[c] Deposits of large commercial banks (accounted for 50 percent of all commercial bank deposits as of December 31, 1987).

NA = Not Available.

## OKLAHOMA CITY MSA

| | | | | Percentage Change | |
|---|---|---|---|---|---|
| Category | 12 Mos. '88 | 12 Mos. '87 | Dec. '88 | 12 Mos. '88/'87 | Dec./Nov. '88 |
| **Employment (Number)** | | | | | |
| Labor Force[a] | NA | NA | 496,800 | NA | 0.8 |
| Total Employment | NA | NA | 473,100 | NA | 0.6 |
| Manufacturing | 48,700 | 47,500 | 49,100 | 2.5 | -0.4 |
| Mining | 11,700 | 11,600 | 11,000 | 0.9 | -0.9 |
| Government | 95,900 | 96,200 | 98,500 | -0.3 | 0.8 |
| Wholesale and Retail Trade | 100,900 | 99,900 | 103,100 | 1.0 | 1.5 |
| Unemployment Rate (%) | NA | NA | 4.8 | — | — |
| **Average Weekly Earnings** | | | | | |
| Manufacturing ($ Per Worker) | 481.60 | 452.79 | 503.86 | 6.4 | -3.0 |
| **Industrial Power Sales (000 Kwh)** | 1,216,176 | 1,231,399 | 93,642 | -1.2 | -8.0 |
| **Mortgage Loans Closed ($000,000)**[b] | 121 | 211 | 12 | -42.7 | 56.0 |
| **Bank Deposits ($000,000)**[c] | | | | | |
| Demand Deposits | 829 | 909 | 875 | -8.8 | 2.1 |
| Time and Savings Deposits | 1,151 | 1,503 | 1,186 | -23.4 | -1.3 |
| **Air Transportation** | | | | | |
| Passengers Enplaning (Number) | 1,509,824 | 1,509,872 | 128,875 | 0.0 | -0.3 |
| Passengers Deplaning (Number) | 1,520,302 | 1,515,834 | 126,246 | 0.3 | -2.7 |
| Freight Enplaned (Tons) | 7,926 | 6,498 | 847 | 22.0 | 52.3 |
| Freight Deplaned (Tons) | 10,765 | 10,366 | 889 | 3.8 | 15.2 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 115,093 | 127,801 | 8,221 | -9.9 | -14.7 |
| Number of Units | 1,585 | 2,022 | 111 | -21.6 | -0.9 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 1,374 | 4,959 | 0 | -72.3 | 0.0 |
| Number of Units | 75 | 143 | 0 | -47.6 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 71,021 | 113,935 | 3,990 | -37.7 | 29.5 |
| Industrial ($000) | 5,539 | 2,988 | 0 | 85.4 | — |
| Institutional ($000) | 16,104 | 18,170 | 230 | -11.4 | — |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 57,313 | 68,219 | 630 | -16.0 | -62.1 |
| All Other Nonbuilding ($000) | 2,085 | 3,445 | 28 | -39.5 | -77.1 |
| Total Construction ($000) | 268,530 | 339,518 | 13,099 | -20.9 | -10.1 |
| **General Business Index** | 93.0 | 89.6 | 95.2 | 3.8 | -0.9 |

Note: Includes revisions.

[a] Civilian Labor Force.

[b] By Savings and Loan Associations.

[c] Deposits of large commercial banks (accounted for 36 percent of all commercial bank deposits as of December 31, 1987).

NA = Not Available.

# Business Highlights

## NEIL J. DIKEMAN, JR.

GENERALLY SPEAKING, the economy of Oklahoma in 1988 behaved as expected at this time a year ago. This is to say that those sectors of the economy which were expected to increase did so and those projected to remain flat or decline also generally followed expectations. In total, economic conditions in the State exhibited considerably more strength than had been the case in the previous three years which hopefully will become the basis for a vastly improved economy in 1989. The 1987 forecasts and actual changes which occurred during 1988 will be discussed in the paragraphs which follow.

### Personal Income

Personal income in Oklahoma during 1988 was forecast to increase by 2 percent over 1987 to a total of $43 billion in terms of current dollars. In actuality, personal income in Oklahoma rose by 6.8 percent to nearly $44 billion in current dollars (or $37.1 billion in 1982 dollar equivalents). As will be shown later, much of this increase in personal income appeared in sales of durable goods at retail which suggests that consumers were reasonably satisfied with the state of the economy in 1988 as was predicted last year.

### Retail Sales

Retail Sales during 1987 showed every indication of beginning to break out of the doldrums which had characterized them since 1983 and was the basis for the forecast of a 4.5 percent increase during 1988. This forecast not only followed the upward pattern of retailing activity during the year but was more conservative than the 5.2 percent gain which was actually registered in 1988. This increase raised the level of sales to $17.4 billion which was the highest on record in terms of current dollars but also represented an increase in real sales of 1.6 percent in 1982 dollar equivalents.

The increase in sales during 1988 was due entirely to a 16.3 percent increase in sales of durable goods which, in turn, was due to gains of 20.3 percent in sales of automobiles and accessories, 6.7 percent in hardware sales and 8.9 percent in sales of furniture. This gain in furniture sales was due in part to an increase of 83 percent in computer and software sales during December. The increase in durable goods sales was tempered by a decline of 0.5 percent in sales of nondurable goods, the third such decrease in as many years. The encouraging aspect of this decline in sales of soft goods was that it represented the smallest relative decrease during the three year period thus suggesting that its downturn had bottomed out and annual gains might be expected in the future. It was also encouraging to note that sales of all nondurable lines except drug stores experienced gains which were greater than seasonally expected in December which indicates that Christmas sales exceeded the rise which normally occurs at this time of the year and resulted in the best Christmas for retailers since 1984.

### Banking and Finance

This economic indicator represented still another area of business activity for which the forecast for 1988 was reasonably accurate if not somewhat conservative. Since the outflow of savings from all regulated depositories in Oklahoma had declined steadily during both 1986 and 1987 and the reasons for these decreases remained in force, it seemed only logical to expect that a further decline in deposits of from 1 to 2 percent would occur in 1988 and occur it did although the drop amounted to 2.2 percent and thereby reduced the deposit level in such institutions to its lowest point since 1983. As was the case in both 1986 and 1987, the decline in savings deposits was the culprit in 1988 as they declined by 3.8 percent while demand deposit balances rose by 0.5 percent. Some of this decline in savings accounts can be attributed to the sharp increase in sales of durable goods at the retail level. However, another, and possibly larger, portion of the decline was due to the investment of savings in non-banking instruments.

### Construction

The earlier forecast of an increase in construction activity during 1988 of 5 percent was predicated on the following assumptions: first, that the trend in outmigration which had adversely affected the demand for housing since 1984 would be reversed and that the resultant inflow of households in the state would trigger an increase in the construction of single family dwellings. Second, that institutional building activity would decline by about 10 percent; third, that commercial building activity would continue the downward trend begun in 1984 and therefore would be off the 1987 level by 15 percent; and fourth, that street and highway, industrial building and all other nonbuilding construction would each increase by from 10 to 15 percent during the year. Unfortunately, the reversal of the trend in out-migration — while it did occur — was much less pronounced than had been anticipated thus resulting in a further decline in the dollar volume of single family housing construction of 15.2 percent. Also, all other nonbuilding construction which includes such projects as installation of sewers, water mains, etc., declined by more than 25 percent during the year and street and highway construction rose by only 5.2 percent rather than the projected 10 to 15 percent increase. As a result of the failure to accurately assess the patterns of change in the various components of the construction industry, the total dollar volume of construction activity during 1988 was 6.6 percent below that of 1987 rather than the projected 5 percent gain and thus extended the downward trend in construction in Oklahoma to its fifth consecutive year. The two types of construction activity that experienced increases during the year which offset somewhat the decreases described above were institutional building construction with an increase of 5 percent and industrial building which rose 71 percent.

### Energy

Preliminary reports indicate that crude oil and natural gas production behaved as expected during 1988 although the changes in these important elements of the State's economy varied somewhat from those which were forecast. Crude oil production during calendar year 1988 declined 3.9 percent to 118.5 million barrels as opposed to the 3 percent decline which was forecast earlier. This represents the fourth successive annual decrease in the volume of crude oil produced in Oklahoma and was caused essentially by the failure of prices to stablilize at levels above $18 per barrel.

Natural and casinghead gas production was 0.2 percent above the 1987 volume which compared less favorably with the forecasted 2 percent increase. This increase marked the second in as many years and raised the level of output to more than 2.0 trillion cubic feet which is the highest volume of output since calendar year 1981 and the second highest on record.

### Manufacturing

Manufacturing activity, as measured by average monthly manufacturing employment, rose by 3.9 percent during 1988 to reverse the downward trend of the two previous years. This increase was in contrast with the forecast which foresaw no appreciable gains during the year. Further evidence that manufacturing activity in the State rose during 1988 was the fact that industrial power sales were 4 percent higher than in 1987.

### Employment

The forecast of average monthly employment during 1988 was for a modest increase in the total number employed. However, this expected gain assumed slight increases in the trades, services and construction coupled with little or no increases in manufacturing, mining and government. However, revised data recently released by the Oklahoma Employment Security Commission indicated that while increases occurred in manufacturing, government, and trades and services, mining employment declined while construction employment remained unchanged. Despite these changes—which were generally upward and would have tended to support the forecast—the average monthly employment in the "All Other" category declined by 16.5 percent which will probably cause total average monthly employment to decline during the year.[1]

One element of optimism which can be found in the current labor data is the fact that average monthly employment of wage and salaried employees in 1988 was 2.2 percent higher than in 1987. Thus, it appears that the huge decline in the "All Other" labor category occurred in smaller operations and in personal service activities.

### Oklahoma General Business Index

The General Business Index for the State rose for the second successive year in 1988 to 94.9 percent—an increase of 0.9 percent. This brought the level for the year to its highest since 1984. Despite the relative importance of this rise, it failed to equal the 4 percent gain which was expected of it at the end of 1987 due primarily to the continued decreases in construction and mining activity as well as in total employment.

### The Outlook

Most changes in a State's economic condition depend heavily on changes which occur in the nation's economy, therefore, any forecasts of future economic changes must take into consideration the changes which might occur at the national level. Forecasts made early in the first year of a new administration are particularly susceptible to error because the administration's policies and priorities remain relatively undefined and the methods which a new administration will employ in solving inherited as well as new problems will probably differ significantly from those used by the previous leaders. Such is the situation at this time in determining the probable course which the nation's as well as Oklahoma's economy will follow during 1989.

Currently economists are divided in their opinions concerning the future of the national economy. Critics of the present administration are of the opinion that it has not taken the actions needed to reduce both the current trade imbalance and the national debt in a timely manner. This failure to act promptly will, in the opinion of the critics, eventually result in a further weakening of the dollar abroad thereby hastening the withdrawal of foreign investors from the bond market thus placing more of the burden of financing the nation on taxpayers and domestic investors. Increases in taxes will, of course, reduce consumption expenditures and this will tend to constrain any real economic growth.

Those economists more neutral or favorably inclined towards the administration are somewhat more optimistic about the future of the economy through at least 1989. For example, the Conference Board's latest report indicates that the business executives contacted by them feel that the economy will continue the same pattern of growth during the next six months as occurred during the past six months. This same organization found that consumer confidence in the economy during 1988 was at its highest level in the past 8 years and that consumer expectations concerning the purchase of high dollar items such as automobiles, appliances, housing etc. were at their highest level since 1983. The consensus of financial forecasters also indicated a continuation of economic growth through the first quarter of 1990 with unemployment remaining relatively low and retail trade remaining strong. This school of economic forecasters, however, does not believe that the growth in 1989 and 1990 will be as strong as that evidenced in 1988. The one trouble spot noted by this latter group of forecasters is that if economic growth during the early and mid portions of 1989 appears to be so rapid as to cause double digit inflation, the Federal Reserve Board will adjust interest rates so as to reduce inflationary pressures and thus impede economic growth.

This latter school of thought seems to be the more widely accepted outlook and therefore the forecasts presented herein are based on the assumption that the national economy will experience growth at least through 1989.

## Personal Income

The relatively large increase in personal income enjoyed by Oklahomans during 1988 provides some basis for hope that the economy of the State is beginning to respond to recent economic development activities and thereby benefit from the nation's economic growth. This suggests that personal income during 1989 should grow slightly faster than in 1988. This growth will come from several sources. The recent increases in wage and salary employment should continue through 1989, at least, which will result in further significant gains in wage and salary income. Income from property (in the form of rents and royalties) and from transfer payments are each expected to experience moderate growth but proprietors' income will probably remain relatively unchanged. As a result of these varied changes, personal income, in terms of current dollars, should reach about $47 billion during 1989 which will represent an increase of about 7 percent. Adjusting for the current rate of inflation, the level of personal income during 1989, in terms of 1982 dollars, would be $36.1 billion—an increase of about 1 percent in real purchasing power.

## Retail Trade

The renewed confidence in the condition of the national as well as regional economy evidenced by consumers during the past 18 months coupled with the recently announced apparent turnaround in outmigration of Oklahoma's population and the opinion of many economists that the economy will remain healthy through 1989, indicates that retail sales in the State will continue the strong upward pattern portrayed in 1988. Moreover, sales of nondurable goods such as food, apparel and drug stores should reverse their declines of the past two years and experience some significant increases thereby becoming contributors to an expected gain in total sales. It will probably be necessary that the nondurable goods lines show some very real gains if the total sales volume is to rise in 1989 since automobile sales are not generally expected to maintain the rates of increases experienced in both 1987 and 1988 but should increase at a more modest pace. At the present time, the strength evidenced by nondurable goods sales during the last three months should carry over into 1989 resulting in an increase of between 5 and 6 percent in sales of these lines. Conversely, the expected decline in the rate of increase in automobile sales should temper the increase in durable goods sales to a more normal range of 8 to 9 percent. As a result, total sales should increase by between 6 and 7 percent during the year thereby reaching a level of $18.5 billion in terms of current dollars.

## Employment

Total nonagricultural employment suffered its second successive decline in 1988 despite increases in some important sectors of the economy. The culprit in 1988, as noted earlier, was the sharp drop in the "All Other" category of jobs. The outlook for the employment levels of the industries included in the "All Other" category (i.e., transportation, public utilities, communications, electric, gas and sanitary services, and finance, insurance and real estate operations) during 1989 is for little if any change in the 1988 level since it is believed that the shake-out of the marginal firms in these employment sectors has run its course. On a more optimistic note, total wage and salary employment in the more basic sectors, which rose for the second successive year in 1988, are forecast to continue the recent trend by increasing by about 3 percent in 1989. This would bring the level of employment up to about 1,448,000 jobs for an overall gain in total employment over 1988 of between 2 and 3 percent. Much of the increase in wage and salary employment is expected to be due to gains in the manufacturing, trade and service sectors while employment in government, construction and mining should undergo minimal changes.

## Construction

In recent years, the forecasts for future construction activity have been extremely poor due largely to the diversity of the types of construction activity which must be forecast and the differing demand pressures which commonly exist for each of the various types of construction. Barring a sharp increase in immigration during the coming year, it is unlikely that any appreciable gains will occur in either single or multi family residential construction. Conversely, the levels of activity in both of these types of construction have reached such low levels that it is difficult to imagine that the double-digit decreases experienced by residential construction of all types over the past four years can continue much longer. In fact, there is some feeling in the real estate industry that the level of activity in 1989 will not differ greatly from that of 1988.

Insofar as commercial building is concerned, that sector too, should experience little change in the dollar volume of activity from 1988 nor should the category labeled "All Other Non Building" construction. This leaves, then, only industrial, institutional and street and highway construction that appear to be susceptible to any significant changes in 1989. Industrial building activity experienced an exceptionally good year in 1988 as it rose by more than 71 percent and it should continue to improve in 1989 although at a much lower rate of increase than occurred in 1988. The feeling now is that the dollar volume of industrial building will be up by about 10 to 12 percent in 1989 and that the value of institutional building will rise between 4 and 6 percent over the same period. Street and highway construction should also increase at between 6 and 7 percent which is about the average rate of the past two years. Combining these incremental forecasts indicates that the dollar volume of total construction activity during 1989 should rise by no more than $26.5 million so as to reach $812 million which represents an increase of 3.3 percent.

## Manufacturing

Manufacturing activity as measured by manufacturing employment and industrial power consumption enjoyed a gain of about 4 percent in 1988 and, based on the pattern of the past 18 months, it appears likely that this same pattern will persist through 1989 although at the slightly accelerated rate of from 4 to 5 percent. This increase in activity is expected to be due to gains in output of both durable—up 4 percent, and nondurable goods—up 3 percent.

## Banking and Finance

As has been the case during the last two years, the end of the outflow of savings deposits in State depositories is not yet in sight and, after suffering the third successive annual decline are forecast to extend this pattern through 1989 although at the slightly accelerated rate of 4 percent. Conversely, demand deposit balances which have risen steadily during the past two years are projected to experience only a modest increase of 0.2 percent. The culimination of these diverse movements will reduce the total deposit balances in Oklahoma depository institutions in 1988 to $31 billion which will be a decrease of 3 percent from the 1988 volume.

## Energy

Forecasts of energy production when predicated solely on past performance tend to be either highly accurate or so inaccurate as to be useless depending on the extent to which prices of crude oil and natural gas fluctuate over the forecast period. Recent market indicators provide some hope that the prices of both crude oil and natural gas have reached some stability in their generally upward movements. This is to say that where these prices have tended to fluctuate widely in the past few years, the movements in recent months have tended to move upward and have lacked the large erratic changes which characterized the 1983-1987 period. Because of the less radical price changes noted in 1988 and early 1989, natural gas production during the calendar year 1989 is projected to increase by between 1 and 2 percent while crude oil production is expected to register a decline of from 3 to 5 percent. Changes of these magnitudes would raise natural gas production to between 2,052,000 mmcf and 2,073,000 mmcf while crude oil production could decline to between 113 million barrels and 115 million barrels during 1989.

## General Business Index

Combining the various changes in the economic indicators discussed above with others such as the number of bankruptcies, sales tax collections and bank clearings suggests that the General Business Index for Oklahoma will increase by about 2 percent during 1989 to bring the level for the year to 96.8.

## Note

[1] Includes transportation, communication, finance, insurance and real estate, utilities, etc.

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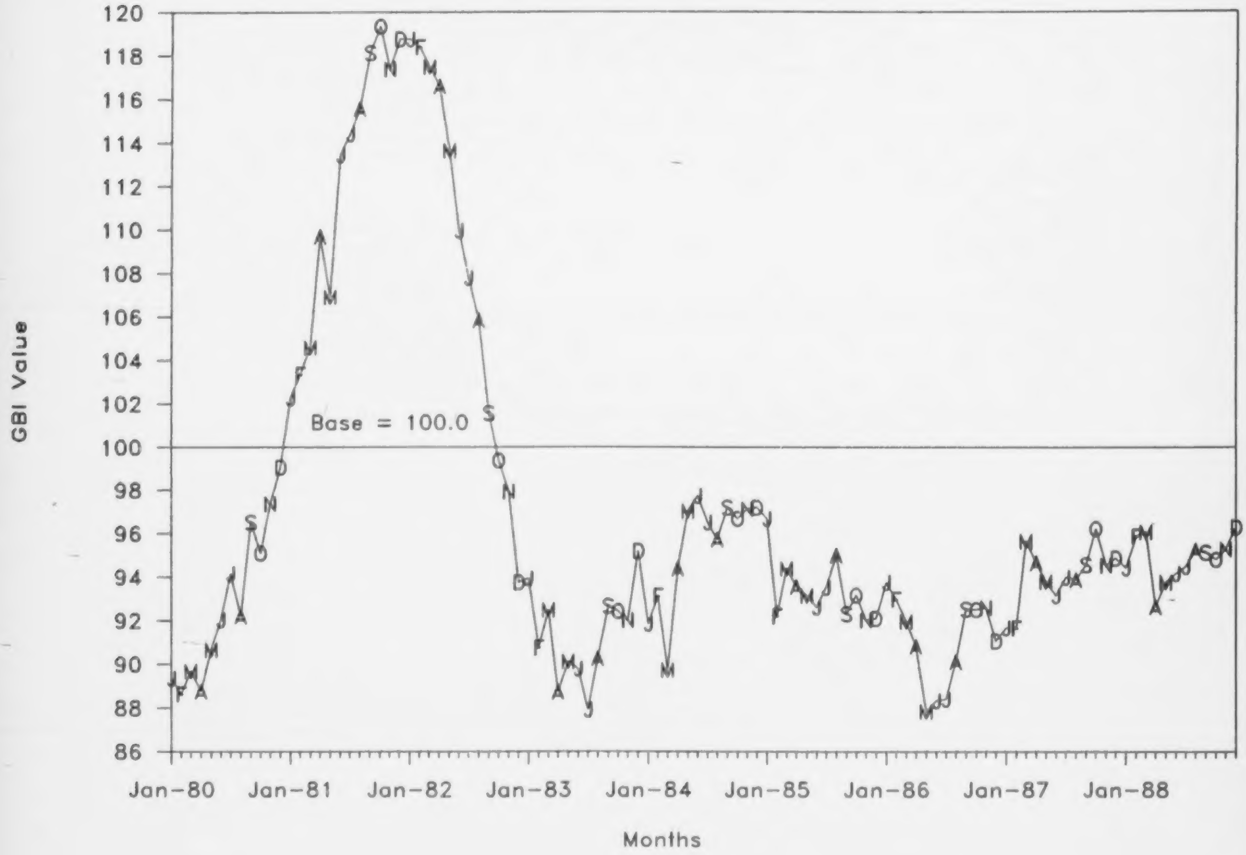
**Oklahoma State General Business Index
January 1980 through December 1988**



# An Analysis of County Personal Income Growth in Oklahoma: 1980-1986

ROBERT C. DAUFFENBACH
TABITHA A. DOESCHER

## Introduction

THIS ARTICLE PROVIDES a detailed analysis of the sources of county personal income growth for Oklahoma's 77 counties during the period 1980-1986. The total growth rate of county personal income is partitioned into its component categories in this analysis, allowing the nature of income changes to be explored on a county-by-county basis. The analysis reveals the fragile nature of personal income gains in the state during these years and the vulnerability of county personal income gains to energy prices and to public policy decisions in Washington. Also provided is a Lorenz Curve analysis of county personal income which assesses whether there has been a significant rural-to-urban shift in the within-state distribution of personal income. Somewhat surprisingly, this analysis reveals *less* inequality in county-level income shares in comparison to population shares in 1986 than in 1980.

For Oklahoma the 1980s have been troubling, as the state's economy reached new heights and then tumbled sharply. Other states shared in these difficulties, as well. In fact, counter to longer-term trends, the 1980s marked a period of increasing dispersion of income among the several states.[1] Still the sharp reversal in fortunes in Oklahoma stands out in the national scene.

As might be expected, the incidence of income gains and losses did not fall uniformly about the state. During the 1980s, dramatic changes in comparative county personal income growth rates occurred across the state. In Figures A and B, county growth rates are categorized into five data divisions (quintile analysis), with 15 counties in each of the first four divisions and 17 in the highest division. Figure A maps average annual rates of change in personal income for the 1980 to 1982 boom period. These growth rates ranged from 4.3 to 47.3 percent during this period. In the figure it is apparent that during this period growth-dominance took place in the Anadarko Basin region. Figure B presents somewhat of a reversal for the 1982 to 1988 period.[2] There has been a dramatic shift in relative growth-dominance to the eastern part of the state. Strength is found especially along the Arkansas border; in fact, relative dominance extends at least two or three counties into Oklahoma from the Arkansas border. The following analysis enables a more in-depth examination of such county-level changes.

## Data

The data used in this analysis is provided by the U.S. Department of Commerce, Bureau of Economic Analysis (BEA). The BEA provides detailed estimates of county personal income by source, but with considerable lag. The most recently available data at the present time is 1986. For any given year, county personal income (CPY) by place of residence can be expressed as the sum of five major components: (1) contributions for social insurance (CSI), which are always negative; (2) residence adjustment (RA), which is sometimes negative; (3) dividends, interest, rents, and royalities (DIRR); (4) transfer payments (TRP); and (5) earnings by place of work (EPW).[3] Thus, for the i-th county:

$$CPY_i = CSI_i + RA_i + DIRR_i + TRP_i + EPW_i$$

To provide even greater detail, it is possible to divide EPW into several industrial components. In this analysis, EPW is divided into farm, mining, construction, manufacturing, supportive services, and government divisions.

Supportive services consist of the following major industrial divisions: (1) transportation, communications, and public utilities; (2) wholesale trade;

(3) retail trade; and (4) services. This analysis will thus use ten components of CPY: the first four major divisions (CSI, RA, DIRR, and TRP) plus six subdivisions of earnings by place of work (EPW).

## Component Growth Methodology

The growth rate contribution of a CPY component is defined as simply the percentage change in the size of that component multiplied by the share of that component in base-period CPY. Thus, if a given component increases by 50 percent and initially represents 20 percent of total CPY, that component contributes 10 percentage points to the total CPY growth rate. It matters not whether the component is positive or negative. Algebraically, let

$CPY_{ij,t}$ = CPY for the i-th county, j-th component in year t;

$CPY_{ij,t+k}$ = CPY for the i-th county, j-th component in year t+k; and,

$CPY_{i.,t}$ = Total CPY for the i-th county for year t.

Then, the contribution of the j-th component to the total CPY growth rate from year t to year t+k for the i-th county, expressed as a percentage, is:

$$R_{ij,t,t+k} = 100\left(\frac{CPY_{ij,t+k} - CPY_{ij,t}}{CPY_{ij,t}}\right)\cdot\left(\frac{CPY_{ij,t}}{CPY_{i.,t}}\right)$$

The first bracketed expression in this formula represents the percentage change in the j-th component, while the second bracketed expression represents the proportion of total CPY originating in the j-th component in the base year. The denominator of the first expression cancels with the numerator of the second; consequently the contribution of the j-th component to the total CPY growth rate simplifies to the change-in-component-growth divided by the initial period total CPY. The sum of the R's over all values of j equals the total CPY growth rate.

**Figure A**

**Average Annual Percent Change in Personal Income, 1980-82**

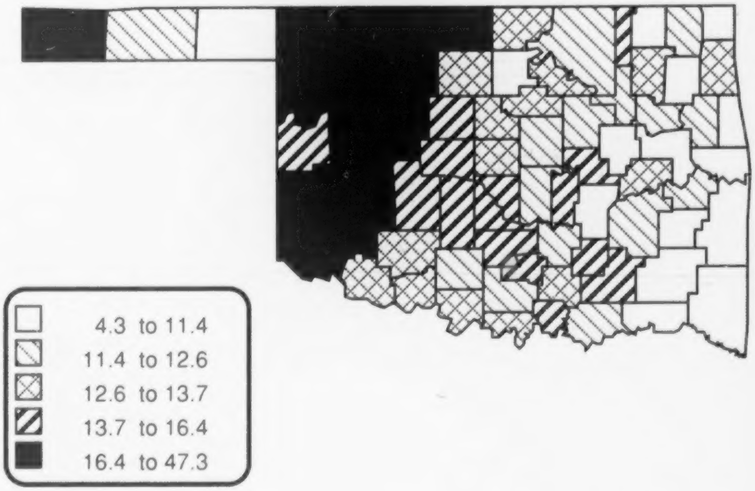
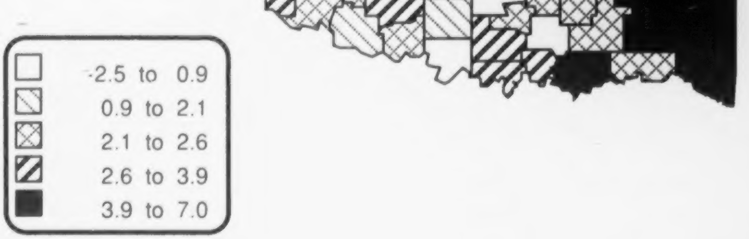


**Figure B**

**Average Annual Percent Change in Personal Income, 1982-88**



## Growth Rate Partitioning

Table 1 presents the results of partitioning the 1980-1986 total personal income growth rate into the several components identified above. For example, consider Adair county. Total personal income in Adair county grew from $98.839 million in 1980 to $155.602 million in 1986, a 57.4 percent gain. Over this same period, transfer payments rose from $28.659 million to $41.118 million, an increase of 43.5 percent. In 1980, transfer payments represented 29.0 percent of total personal income in Adair county. Therefore, between 1980 and 1986 the transfer payments component contributed 12.6 percentage points to Adair county's total CPY growth rate of 57.4 percent (.435 × .290 × 100 = 12.6 percent). The other positive numbers in Table 1 can be interpreted in a similar manner.

Components of personal income are sometimes negative and are somewhat more complicated to interpret. In particular, contributions to social insurance (CSI) are always negative.[4] Between 1980 and 1986, CSI in Adair county rose by 91.6 percent, from $2.033 to $3.895 million. Since CSI in 1980 represented -2.0 percent of Adair county's total personal income, the social insurance component contributed -1.9 percentage points to Adair county's total CPY growth rate of 57.4 percent (.916 × -.020 × 100 = -1.9 percent). Another perspective on the interpretation of negative values is the following: Had CSI in Adair county remained at the $2.033 million level instead of rising to $3.895 million, the 1986 total CPY would have been $57.464 million, a 59.3 percent gain. That is, the actual growth rate is 1.9 percentage points lower than it would have been had CSI remained constant. Thus, in this manner, the change in social insurance contributions (a negative factor) can be said to have caused a reduction of 1.9 percentage points in the overall growth rate.

In addition to showing the county-by-county partitioning of the 1980-1986 total personal income growth rate, Table 1 reports the median, mean, and standard deviation for each component. The median and mean values provide useful benchmarks for assessing growth impluses by county.

Review of Table 1 shows that growth from residence adjustment is high in Cleveland, Canadian, and Wagoner counties and low in Tulsa and Oklahoma counties, thereby indicating on-balance place-of-residence earnings flows into the former and away from the latter counties. Growth from dividends, interest, rents, and royalties (DIRR) exceeds median values substantially in Roger Mills, Dewey, Washita, Cimarron, Harper, Delaware, Beckham, Caddo, Kiowa, and Custer counties and, with the exception of Delaware county, is in all likelihood energy-related. These counties had 20 percent or higher growth components from DIRR. Delaware and McIntosh counties scored high through transfer payments growth. This outcome, in conjunction with their lake front locations, higher than average DIRR's, and supportive services growth rates, may indicate that a retirement industry is beginning to flourish there.

The farm income growth component was high in Cimarron, Harmon, Texas, and Harper counties. It is interesting that these four counties also had the highest total personal income growth rates in the 1980-1986 period. Federal government payments to Oklahoma farmers rose from $35 million to $393 million during this period, which undoubtedly assisted growth in this component. Growth in the mining component was positive and sizeable for Alfalfa and Washington counties, but is most notable for its many negative contributions over the period. Greatly affected were Craig, Woodward, Beckham, and Washita counties.

The average county received almost no growth impulse from the manufacturing component; the median contribution was +0.8 percent. However, many counties fared quite well by this measure, including Kay, Custer, Muskogee, Mayes, Adair, and several others. Nevertheless, overall growth from this component was very low. Counties impacted negatively include Stephens and Ottawa. However, both of these counties appear to be recovering based on recent evidence from sales tax collections and their projected 1988 personal income values.

Supportive services, an amalgamation of remaining private-sector industries, was, as might be expected, an important source of growth for Oklahoma and Tulsa counties, each of which attained growth in this component equal to about one-half of total personal income growth. Since service industries are expected to be the most rapidly growing industries in the future, this bodes well for these two areas. Growth from the government component was instrumental in boosting personal income growth rates appreciably in counties with military installations, including Jackson, Comanche, and Cleveland counties. Garfield county, with Vance Air Force Base, proved the expection with a below-median growth from this source. For Jackson and Cleveland counties, growth of the government component represented over one-third of the total growth rate.

## Lorenz Curve Analysis

The question of whether there has been a dramatic shift in county personal income from rural-to-urban counties is examined next. Lorenz Curve analysis[5] is used in this assessment and the results are reported in Table 2. In this analysis, the 77 counties are first ordered by population from low to high; next, the shares of total population are computed and then accumulated. Similarly, the share of total state personal income is computed and accumulated for the population-ordered counties. The 15 least populated counties are combined into Group 1, the next 15 in Group 2, and so on. The two largest counties, Oklahoma and Tulsa counties, are combined to form a sixth group.

In Table 2, part A, it is seen that the 15 least populated counties accounted for 2.8 percent of total personal income (place of residence basis) and 3.1 percent of the state population in 1980.

# TABLE 1

## Component Growth Rates for Oklahoma Counties: 1980-1986

| | | | | | Earnings by Place of Work (EPW) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | CSI | RA | DIRR | TRP | Farm | Mining | Const. | Mfg. | Sup. Serv. | Govt. | Total |
| Adair | -1.9 | 11.8 | 8.1 | 12.6 | 6.8 | 0.3 | 0.3 | 8.0 | 5.4 | 6.0 | 57.4 |
| Alfalfa | -1.6 | -1.8 | 12.8 | 10.2 | 12.5 | 7.7 | 0.0 | 0.0 | 4.4 | 3.1 | 47.3 |
| Atoka | -2.4 | -7.5 | 11.1 | 17.5 | 1.0 | 0.1 | 5.7 | 1.9 | 7.9 | 13.7 | 49.0 |
| Beaver | -1.4 | -1.4 | 17.4 | 7.1 | -7.8 | -0.2 | 0.7 | -0.4 | 10.0 | 3.9 | 28.1 |
| Beckham | -1.2 | 2.0 | 21.1 | 12.3 | 1.8 | -9.7 | 0.1 | 0.0 | 10.4 | 5.6 | 42.3 |
| Blaine | -1.0 | 1.4 | 18.5 | 10.5 | 17.3 | -3.3 | -2.3 | 3.0 | 2.4 | 4.7 | 51.3 |
| Bryan | -1.7 | 5.0 | 13.2 | 15.1 | 3.0 | 0.4 | 0.8 | -2.8 | 12.2 | 8.5 | 51.9 |
| Caddo | -1.3 | 0.5 | 20.7 | 12.5 | 7.9 | -3.2 | 0.3 | -1.9 | 9.7 | 6.0 | 51.1 |
| Canadian | -1.8 | 21.9 | 9.0 | 8.1 | -0.3 | -0.3 | 1.6 | 4.8 | 9.7 | 5.1 | 58.0 |
| Carter | -2.6 | -1.1 | 14.0 | 8.9 | -0.4 | 1.0 | 0.5 | 5.3 | 12.8 | 4.1 | 42.5 |
| Cherokee | -1.5 | 4.2 | 9.6 | 15.0 | 8.7 | 0.1 | -0.2 | 0.4 | 9.5 | 12.4 | 58.3 |
| Choctaw | -0.9 | 6.2 | 8.5 | 12.6 | 3.9 | -0.8 | -8.8 | -1.0 | 7.4 | 4.5 | 25.9 |
| Cimarron | -1.2 | 5.1 | 21.8 | 12.3 | 126.9 | 0.8 | -0.2 | 0.0 | 10.6 | 0.7 | 175.3 |
| Cleveland | -1.7 | 20.9 | 8.7 | 7.7 | 0.0 | 0.1 | 1.1 | 1.1 | 10.4 | 10.1 | 58.0 |
| Coal | -1.6 | -2.6 | 12.7 | 18.1 | 2.3 | 0.1 | -1.7 | 4.5 | 6.0 | 6.3 | 42.0 |
| Comanche | -2.9 | -0.5 | 6.0 | 9.9 | 1.0 | 0.3 | 0.9 | 4.3 | 13.5 | 20.2 | 54.5 |
| Cotton | -1.3 | 1.8 | 10.5 | 13.2 | 8.3 | 0.1 | 1.2 | 2.7 | 3.8 | 4.5 | 44.8 |
| Craig | -1.6 | 5.4 | 12.3 | 12.4 | 2.4 | -9.1 | 0.4 | 2.7 | 11.7 | 11.7 | 48.0 |
| Creek | -1.5 | 16.6 | 11.5 | 8.6 | 0.4 | 1.2 | 0.7 | 2.5 | 7.6 | 4.0 | 49.2 |
| Custer | -2.5 | -1.4 | 20.0 | 9.1 | 1.4 | -0.1 | 0.0 | 10.9 | 9.1 | 7.2 | 53.7 |
| Delaware | -1.7 | 10.8 | 21.3 | 19.0 | 13.1 | 0.2 | -0.5 | 1.7 | 10.3 | 6.0 | 80.2 |
| Dewey | -1.8 | -8.3 | 30.4 | 11.4 | 8.0 | -3.7 | 0.7 | 0.8 | 12.1 | 7.3 | 59.1 |
| Ellis | -2.3 | -10.5 | 15.0 | 8.4 | 3.3 | 0.0 | 0.2 | -2.3 | 21.6 | 3.4 | 36.7 |
| Garfield | -1.6 | 0.3 | 9.9 | 9.2 | 0.1 | 1.8 | -2.2 | -3.5 | 13.4 | 3.5 | 27.2 |
| Garvin | -1.0 | 1.6 | 12.7 | 17.6 | 0.6 | -3.9 | -0.9 | 0.4 | 3.1 | 5.9 | 35.9 |
| Grady | -1.6 | 1.7 | 12.8 | 9.3 | 1.8 | 1.4 | 1.2 | 1.4 | 8.9 | 5.1 | 39.1 |
| Grant | -1.2 | 0.5 | 17.2 | 9.1 | 19.7 | 1.4 | 0.6 | 0.5 | 5.0 | 2.8 | 55.7 |
| Greer | -1.5 | -4.3 | 13.5 | 17.9 | 7.7 | 0.2 | 2.1 | -1.3 | 5.0 | 11.3 | 50.6 |
| Harmon | -1.2 | 2.9 | 14.3 | 17.5 | 32.6 | 0.0 | 2.5 | 0.0 | 2.5 | 5.6 | 76.6 |
| Harper | -1.2 | -3.6 | 21.7 | 9.5 | 27.4 | -2.5 | -1.1 | -0.3 | 8.6 | 7.1 | 65.6 |
| Haskell | -1.3 | 8.3 | 13.3 | 13.2 | 0.1 | 6.4 | 0.8 | 0.4 | 10.7 | 4.5 | 43.5 |
| Hughes | -1.0 | 0.1 | 12.2 | 15.0 | -1.7 | -2.5 | 0.7 | -2.1 | 4.6 | 3.3 | 28.7 |
| Jackson | -2.5 | -1.8 | 9.6 | 12.5 | 9.0 | 0.0 | 0.4 | 3.5 | 8.9 | 20.9 | 60.6 |
| Jefferson | -1.2 | -4.0 | 13.1 | 11.0 | -1.1 | -0.1 | 0.7 | 2.3 | 2.6 | 4.2 | 27.4 |
| Johnston | -1.5 | 0.7 | 8.3 | 13.8 | 0.3 | 1.4 | 0.6 | 0.6 | 6.1 | 7.4 | 37.0 |
| Kay | -2.2 | 0.0 | 11.7 | 7.3 | 0.8 | -1.1 | -0.9 | 11.1 | 8.1 | 3.1 | 37.9 |
| Kingfisher | -1.1 | 3.0 | 16.3 | 7.5 | 0.6 | -7.9 | -2.3 | 0.7 | 9.4 | 4.5 | 30.7 |
| Kiowa | -1.4 | -0.1 | 20.3 | 14.1 | 9.0 | 2.0 | 0.7 | 1.7 | 6.9 | 3.8 | 53.1 |
| Latimer | -1.5 | 9.1 | 12.0 | 15.2 | -1.7 | -2.5 | -2.4 | 6.4 | 6.8 | 8.4 | 49.6 |
| LeFlore | -1.4 | 12.8 | 10.3 | 16.5 | 2.0 | -1.2 | 1.2 | 1.1 | 6.2 | 6.0 | 53.6 |
| Lincoln | -0.8 | 10.9 | 9.7 | 11.0 | -0.8 | -2.5 | 1.2 | -1.7 | 3.7 | 4.0 | 34.8 |
| Logan | -1.1 | 7.0 | 10.0 | 11.2 | 0.5 | 0.1 | 1.2 | -1.1 | 5.5 | 4.8 | 38.3 |
| Love | -1.6 | -1.5 | 12.3 | 10.8 | 4.6 | -1.7 | 0.5 | 3.2 | 9.9 | 5.3 | 41.6 |
| Major | -0.9 | 2.5 | 19.9 | 9.3 | 14.1 | -4.9 | 0.4 | -1.6 | 4.2 | 4.6 | 47.7 |
| Marshall | -1.9 | 3.3 | 13.4 | 16.3 | -1.0 | 0.2 | 1.3 | 4.8 | 7.3 | 5.5 | 49.2 |
| Mayes | -1.7 | 3.4 | 10.8 | 10.8 | 0.7 | 0.3 | 6.1 | 8.2 | 7.3 | 5.7 | 39.5 |
| McClain | -1.4 | 13.9 | 10.2 | 9.9 | 2.5 | 0.4 | 2.5 | -0.4 | 8.5 | 4.8 | 50.9 |
| McCurtain | -2.2 | 1.6 | 6.2 | 12.0 | 5.1 | 0.3 | 1.7 | 5.3 | 6.7 | 6.0 | 43.8 |
| McIntosh | -1.6 | 1.8 | 14.2 | 19.5 | 0.2 | 0.7 | 0.2 | -0.4 | 10.0 | 4.7 | 49.1 |
| Murray | -2.0 | -2.5 | 11.6 | 13.9 | 1.5 | 0.0 | 2.5 | 0.5 | 10.8 | 7.1 | 43.4 |
| Muskogee | -2.7 | -2.2 | 8.3 | 10.0 | 2.5 | -0.3 | -1.6 | 10.0 | 13.6 | 7.2 | 44.8 |
| Noble | -1.5 | 0.7 | 11.2 | 9.2 | 2.9 | 0.2 | -13.5 | 5.7 | 11.6 | 5.8 | 26.2 |
| Nowata | -0.5 | -0.9 | 6.0 | 9.8 | 2.5 | -6.7 | -1.2 | -1.9 | 4.9 | 2.7 | 11.6 |
| Okfuskee | -1.6 | -1.5 | 10.8 | 16.7 | 1.6 | -3.2 | 3.4 | 0.1 | 6.9 | 6.4 | 41.7 |
| Oklahoma | -3.3 | -7.6 | 10.1 | 7.5 | 0.0 | -0.6 | 0.1 | 2.9 | 20.3 | 11.3 | 40.9 |
| Okmulgee | -1.7 | -0.7 | 10.5 | 11.6 | 0.2 | -0.4 | 1.1 | 4.2 | 5.2 | 4.7 | 34.3 |
| Osage | -1.0 | 9.9 | 7.6 | 7.2 | 1.2 | -0.5 | 0.0 | 1.2 | 3.8 | 3.1 | 30.3 |
| Ottawa | -0.9 | 6.4 | 9.3 | 13.7 | 3.1 | 0.3 | 0.5 | -14.9 | 8.8 | 5.3 | 31.7 |
| Pawnee | -1.2 | 4.8 | 12.1 | 10.3 | 0.3 | 3.3 | -0.3 | -0.7 | 5.6 | 3.8 | 37.6 |
| Payne | -2.5 | 0.1 | 11.4 | 9.8 | 0.2 | 0.3 | 0.3 | 5.8 | 11.2 | 13.9 | 50.0 |
| Pittsburg | -2.4 | 1.0 | 11.6 | 13.4 | 0.9 | 0.6 | -0.3 | 5.5 | 14.3 | 7.9 | 51.1 |
| Pontotoc | -2.1 | 0.2 | 10.8 | 10.9 | 0.9 | 2.9 | 1.3 | 2.2 | 11.4 | 8.2 | 39.2 |
| Pottawatomie | -1.9 | 3.7 | 7.7 | 10.3 | 0.2 | 0.5 | 0.4 | 4.0 | 10.9 | 4.4 | 38.5 |
| Pushmataha | -1.5 | 3.1 | 10.0 | 18.4 | 1.2 | 0.2 | 1.3 | 0.6 | 6.7 | 8.0 | 45.5 |
| Roger Mills | -1.1 | -3.9 | 34.9 | 10.1 | 3.3 | -6.4 | -0.5 | -0.3 | 10.2 | 6.2 | 45.9 |
| Rogers | -1.9 | 14.1 | 8.4 | 7.0 | 0.0 | 0.3 | 1.4 | 7.3 | 9.2 | 4.5 | 50.3 |
| Seminole | -1.5 | -1.8 | 12.3 | 11.7 | 0.4 | -3.5 | 2.2 | 0.7 | 7.1 | 4.4 | 31.9 |
| Sequoyah | -1.7 | 13.7 | 8.5 | 14.5 | 0.5 | -0.2 | 1.5 | 2.1 | 9.6 | 5.9 | 53.4 |
| Stephens | -0.9 | 0.9 | 11.4 | 10.1 | 1.0 | 2.3 | -0.5 | -9.8 | 6.6 | 3.6 | 20.2 |
| Texas | -1.1 | 3.2 | 10.8 | 7.1 | 32.5 | -3.5 | 0.3 | 0.7 | 4.2 | 5.4 | 59.6 |
| Tillman | -1.2 | 0.8 | 11.1 | 12.8 | 17.0 | 0.3 | 0.0 | -0.8 | 4.1 | 4.7 | 48.1 |
| Tulsa | -3.2 | -4.9 | 11.1 | 6.7 | 0.3 | 1.5 | 0.5 | 2.4 | 20.4 | 4.4 | 39.1 |
| Wagoner | -0.8 | 26.2 | 6.9 | 7.6 | 0.0 | 0.2 | 1.9 | 1.0 | 2.9 | 2.8 | 50.7 |
| Washington | -1.9 | -2.1 | 11.3 | 6.1 | 0.1 | 6.2 | -0.6 | 1.3 | 3.6 | 1.5 | 25.5 |
| Washita | -0.9 | -5.0 | 22.8 | 10.1 | 12.1 | -9.8 | 2.7 | -0.7 | 6.0 | 5.8 | 44.0 |
| Woods | -1.7 | -0.8 | 16.5 | 10.7 | 5.1 | 1.5 | -0.1 | 0.0 | 8.9 | 6.4 | 46.6 |
| Woodward | -0.8 | 0.1 | 10.5 | 7.7 | -1.7 | 9.3 | -0.4 | -0.4 | 3.4 | 7.2 | 16.2 |
| Median | -1.5 | 0.9 | 11.5 | 10.9 | 0.9 | -0.3 | 0.4 | 0.8 | 8.5 | 5.4 | 44.8 |
| Mean | -3.2 | 2.7 | 13.0 | 11.6 | 5.3 | -1.3 | 0.1 | 1.5 | 8.4 | 6.1 | 45.9 |
| Std.Dev. | 13.7 | 6.9 | 5.1 | 3.3 | 15.9 | 3.1 | 2.4 | 3.9 | 3.9 | 3.5 | 19.3 |

## TABLE 2

### Lorenz Curve Analysis of Personal Income: Oklahoma Counties

**A. 1980 County Personal Income by Place of Residence**

| | Percent of Total State Personal Income | Cumulative Percent | Percent of Total State Population | Cumulative Percent |
|---|---|---|---|---|
| **Group 1** | 2.8 | 2.8 | 3.1 | 3.1 |
| **Group 2** | 4.4 | 7.2 | 5.8 | 9.0 |
| **Group 3** | 8.2 | 15.4 | 9.7 | 18.6 |
| **Group 4** | 13.0 | 28.4 | 16.5 | 35.1 |
| **Group 5** | 29.6 | 58.0 | 30.5 | 65.7 |
| **Oklahoma & Tulsa Counties** | 42.0 | 100.0 | 34.4 | 100.0 |

Gini Coefficient = 9.00%

**B. 1986 County Personal Income by Place of Residence**

| | Percent of Total State Personal Income | Cumulative Percent | Percent of Total State Population | Cumulative Percent |
|---|---|---|---|---|
| **Group 1** | 2.9 | 2.9 | 2.9 | 2.9 |
| **Group 2** | 4.4 | 7.3 | 5.4 | 8.3 |
| **Group 3** | 8.2 | 15.5 | 9.7 | 18.0 |
| **Group 4** | 13.1 | 28.6 | 16.3 | 34.3 |
| **Group 5** | 30.1 | 58.7 | 31.0 | 65.3 |
| **Oklahoma & Tulsa Counties** | 41.3 | 100.0 | 34.7 | 100.0 |

Gini Coefficient = 7.59%

**C. 1980 County Earnings by Place of Work**

| | Percent of Total State Personal Income | Cumulative Percent | Percent of Total State Population | Cumulative Percent |
|---|---|---|---|---|
| **Group 1** | 2.4 | 2.4 | 3.1 | 3.1 |
| **Group 2** | 4.2 | 6.5 | 5.8 | 9.0 |
| **Group 3** | 7.9 | 14.4 | 9.7 | 18.6 |
| **Group 4** | 13.0 | 27.4 | 16.5 | 35.1 |
| **Group 5** | 29.8 | 57.2 | 30.5 | 65.7 |
| **Oklahoma & Tulsa Counties** | 42.8 | 100.0 | 34.4 | 100.0 |

Gini Coefficient = 10.33%

**D. 1986 County Earnings by Place of Work**

| | Percent of Total State Personal Income | Cumulative Percent | Percent of Total State Population | Cumulative Percent |
|---|---|---|---|---|
| **Group 1** | 2.4 | 2.4 | 2.9 | 2.9 |
| **Group 2** | 4.1 | 6.6 | 5.4 | 8.3 |
| **Group 3** | 7.8 | 14.4 | 9.7 | 18.0 |
| **Group 4** | 13.0 | 27.4 | 16.3 | 34.3 |
| **Group 5** | 30.5 | 57.8 | 31.0 | 65.3 |
| **Oklahoma & Tulsa Counties** | 42.2 | 100.0 | 34.7 | 100.0 |

Gini Coefficient = 9.31%

Similarly, Group 2 represented 5.8 percent of the population, but only 4.4 percent of the income. Thus, the 30 smallest counties represented 9.0 percent of population and 7.2 percent of total personal income. Accumulating the results through Group 5 shows cumulative population share almost 8 percentage points above cumulative income share. This gap is reversed in Group 6, in which the two largest counties exhibit a disproportionate share of income in comparison to population share.

The Gini coefficient provides a summary measure of the extent of inequality across all units of analysis (in this case counties). A Gini coefficient lies between 0 and 100 percent.[6] A value of zero indicates zero inequality, i.e., an exact match between share of population and share of income for each unit of analysis. The Gini coefficient for 1980 county personal income by place of residence was 9.0 percent. This is a relatively small degree of inequality. Moreover, note that the Gini coefficient improved to 7.6 percent in 1986 (part B), a substantial decline. This improvement in the equality of the distribution of county personal income resulted, primarily, from movement in the population distribution. Shares of income for the first four groups were essentially equal in 1980 and 1986. In essence, the smaller counties were able to hold onto their share of income while their populations grew less rapidly than the state as a whole, thereby generating overall improvement in the Gini coefficient. In addition, the two largest counties lost in income share to Group 5, bringing about greater equality in the county income distribution.

Parts C and D of Table 2 repeat the Lorenz Curve analysis using county earnings by place of work. Greater inequality was expected, given the dominance of rural-to-urban job commuting patterns; this was shown to be true. In both 1980 and 1986, the Gini coefficient for income by place of residence was smaller than the Gini coefficient for earnings by place of work. However, the pattern over time was similar: the Gini coefficient for earnings by place of work dropped from 10.3 percent to 9.3 percent between 1980 and 1986. Although there was little change in the share of earnings from Group 1 through Group 4, Group 5 gained at the expense of the two largest counties.

Over the years 1980-1986, the county personal income evidence emphatically does not support the hypothesis of a declining rural Oklahoma. The population of smaller counties has grown less rapidly than that of the state as a whole, but these population growth differentials do not appear to be large and are certainly not counter to long-term rural-to-urban trends. In general, smaller counties have been able to maintain their shares of total state personal income even though they are not growing as rapidly. The largest 15 counties (Group 5) have gained at the expense of the largest two counties. Therefore, in net terms, the county distribution of personal income is more, not less, equal.

## Summary

Taken as a whole, this analysis of county personal income component growth rates reveals the extremely fragile nature of Oklahoma's personal income gains. Although many counties have achieved rates of growth well in excess of inflation, they have done so in a manner that could easily fall victim to the federal budget axe. Farm programs and military spending will be under severe pressure in the era of budget stringency that is about to descend. Transfer payments, particularly social security, will be under long-term duress. Continuance of weak energy prices will differentially impact counties with sizeable DIRR components.

In general, this research has found that Oklahoma personal income problems are in terms of the size of the pie, not its within-state distribution. The improvements noted in the county personal income distribution are beneficial, but not redeeming. Unfortunately, these improvements, at least for the smaller, rural areas, are not based upon a solid foundation of private sector growth. While Oklahoma does not appear to face a rural crisis of greater proportions than it typically suffers, there is little doubt that without continued maintenance of transfer payment mechanisms, a crisis could quickly develop.

Oklahoma is not the only state in this situation, certainly, and there is recent evidence that personal income in the state is beginning to grow more rapidly. Nevertheless, given the general absence of other growth impulses, domestic program cuts in Washington could strike Oklahoma a heavy blow. This analysis reveals that Oklahoma needs to continually strive for economic development renewal. Short, quickly diminishing bursts of activity will prove insufficient to combat long-term problems like the federal deficit. Directed and sustained activity will be necessary to raise significantly the private sector growth potential of the Oklahoma economy.

## Notes

[1] See Kate (1988) and Friedenberg (1987).

[2] Currently, 1986 is the most recent year of total county personal income estimates that are available from the U.S. Department of Commerce, Bureau of Economic Analysis. The 1988 county personal income data used to prepare Figure B are projections made by the Office of Business and Economic Research.

[3] Contributions to social insurance (CSI) consist of contributions made by individuals under various social insurance programs, including old-age, survivors, disability, and hospital insurance, supplemental medical insurance, certain retirement programs, and state unemployment insurance. These are excluded from personal income by treating them as explicit deductions. Therefore, the CSI component of personal income is always negative. The second component, residence adjustment (RA), is basically an accounting measure, necessary because county of residence is for many people distinct from the county in which they work. Thus, for a given county there are two measures of total personal income: (1) income by place of residence and (2) income by place of work. The residence adjustment factor represents the net adjustment necessary to translate income by place of work to income by county of residence. The dividends, interest, rent, and royalties (DIRR) category is self-explanatory. The fourth component of total personal income is transfer payments (TRP), which are income payments to persons for which they do not render current services. Transfer payments include government payments to individuals (retirement and disability insurance benefit payments; medical payments; income maintenance benefit payments such as supplemental security income payments, aid to families with dependent children, and food stamps; unemployment benefit payments; veterans benefit payment; and federal education and training assistance payments), payments to nonprofit institutions, and business payments to individuals (including liability payments for personal injury, corporate gifts to nonprofit institutions, and consumer bad debts). Finally, earnings by place of work (EPW) consist of total labor and proprietor's income, reported by place of work.

[4] Recall that social insurance contributions are treated as deductions to personal income and are, therefore, always negative. Other components can sometimes be negative, especially residence adjustments. The interpretation of negative values is important, especially in instances where adjustments for inflation are made. In such instances, negative values would, in all likelihood, be much more prevalent.

[5] See *The Methods and Materials of Demography*, p. 178 for a discussion of the Lorenz Curve. Several elementary statistics textbooks also contain a discussion of the Lorenz Curve.

[6] In a graph of cumulative shares of income plotted against cumulative shares of population, the Gini coefficient is the ratio of the area lying between the diagonal line of equality (45 degree line) to the total area beneath the line of equality. See *The Methods and Materials of Demography*, p. 178 for additional discussion.

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# OKLAHOMA BUSINESS BULLETIN

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## SUMMARY OF INDICATORS

| Category | Jan. '89 | Jan. '88 | Dec. '88 | Percentage Change Jan. '89/'88 | Percentage Change Jan./Dec. '89/'88 |
|---|---|---|---|---|---|
| **Personal Income (Monthly Average)** | | | | | |
| Unadjusted ($000,000) | 3,841 | 3,539 | 3,775 | 8.5 | 1.7 |
| Adjusted for CPI ($000,000) | 3,172 | 3,059 | 3,113 | 3.7 | 1.2 |
| **Crude Oil Production (000 bbl)** | 9,430 | 10,028 | 9,845 | -6.0 | -4.2 |
| **Natural Gas Production (000 mcf)**[a] | 140,456 | 186,752 | 216,916 | -24.8 | -35.3 |
| **Industrial Power Sales (000,000 Kwh)**[b] | 721 | 689 | 698 | 4.6 | 3.4 |
| **Total Bank Deposits (Monthly Average) ($000,000)**[c] | | | | | |
| Demand | 7,739 | 7,694 | 7,614 | 0.6 | 1.6 |
| Savings | 23,773 | 24,625 | 23,811 | -3.5 | -0.2 |
| **Savings and Loan Associations ($000,000)** | | | | | |
| Assets | 10,850 | 10,199 | 11,052 | 6.4 | -1.8 |
| New Mortgage Loans Closed | 61 | 36 | 54 | 69.4 | 12.4 |
| **Employment** | | | | | |
| Total Labor Force (000)[d] | 1,524.7 | 1,543.6 | 1,528.5 | -1.2 | -0.2 |
| Total Employment (000) | 1,423.5 | 1,424.7 | 1,443.0 | -0.1 | -1.4 |
| Unemployment Rate (%) | 6.6 | 7.7 | 5.6 | — | — |

Note: Includes revisions.

[a] Natural Gas includes casinghead gas.
[b] Sales of larger privately owned utility companies.
[c] Total deposits of all depository institutions.
[d] Civilian Labor Force.

## RETAIL TRADE IN SELECTED CITIES
($000)

| | Jan. '89 | | Adjusted '89/'88 | Adjusted '89/'88 | | Jan. '89 | | Adjusted '89/'88 | Adjusted '89/'88 |
|---|---|---|---|---|---|---|---|---|---|
| City | Adjusted | Unadjusted | Jan. | Jan./Dec. | City | Adjusted | Unadjusted | Jan. | Jan./Dec. |
| Ada | 13,683 | 12,877 | 2.4 | -11.1 | McAlester | 9,955 | 8,718 | -13.0 | 0.1 |
| Altus | 11,660 | 10,645 | -10.2 | -7.1 | Miami | 10,913 | 10,012 | -10.4 | -0.6 |
| Alva | 3,591 | 3,395 | -4.1 | -4.6 | Midwest City | 34,297 | 30,148 | -10.0 | -15.1 |
| Anadarko | 4,809 | 4,147 | -6.1 | -7.5 | Moore | 12,111 | 10,950 | -16.0 | -15.5 |
| Ardmore | 19,053 | 16,593 | -6.7 | -4.8 | Muskogee | 22,470 | 19,635 | -24.7 | -3.7 |
| Bartlesville | 20,274 | 18,158 | 3.3 | -0.4 | Norman | 63,197 | 58,669 | -0.4 | -1.9 |
| Blackwell | 3,500 | 3,109 | -3.0 | 2.8 | Oklahoma City | 279,891 | 248,956 | 2.1 | -4.8 |
| Broken Arrow | 19,986 | 17,744 | 1.4 | -5.9 | Okmulgee | 5,329 | 4,689 | -1.7 | -2.5 |
| Chickasha | 9,008 | 8,188 | -3.9 | -3.1 | Pauls Valley | 4,375 | 3,982 | 7.0 | 4.0 |
| Clinton | 6,501 | 5,933 | -4.6 | -3.2 | Pawhuska | 1,728 | 1,517 | 7.5 | 1.3 |
| Cushing | 5,237 | 4,576 | -3.1 | -3.8 | Ponca City | 17,013 | 14,949 | -0.8 | -4.8 |
| Del City | 11,096 | 10,006 | -1.0 | -6.0 | Poteau | 4,711 | 4,419 | 6.0 | 0.7 |
| Duncan | 13,866 | 12,750 | -1.6 | -5.5 | Sand Springs | 8,537 | 7,598 | 2.6 | -8.9 |
| Durant | 10,229 | 9,106 | -12.1 | -2.2 | Sapulpa | 12,444 | 11,441 | -1.1 | -3.3 |
| Edmond | 25,802 | 23,936 | 4.0 | 2.2 | Seminole | 5,210 | 4,880 | -6.7 | -17.9 |
| Elk City | 7,701 | 7,147 | 0.3 | -5.9 | Shawnee | 24,856 | 22,699 | -25.9 | -8.2 |
| El Reno | 8,281 | 7,758 | 9.0 | -4.8 | Stillwater | 24,929 | 24,069 | -7.1 | -4.4 |
| Guthrie | 5,106 | 4,645 | 1.7 | -2.8 | Tahlequah | 7,318 | 6,534 | -1.8 | -10.4 |
| Guymon | 4,696 | 4,214 | 0.3 | -1.1 | Tulsa | 247,480 | 222,982 | -2.7 | -10.8 |
| Henryetta | 4,542 | 4,032 | -3.4 | -4.7 | Watonga | 1,705 | 1,562 | 5.6 | -1.6 |
| Hobart | 2,231 | 2,134 | -2.3 | -11.4 | Weatherford | 5,366 | 5,202 | -4.1 | -7.4 |
| Holdenville | 2,579 | 2,408 | -3.4 | -6.5 | Wewoka | 1,053 | 972 | -8.0 | -5.1 |
| Hugo | 2,808 | 2,558 | -11.2 | 2.4 | Woodward | 11,458 | 10,161 | -6.0 | -3.8 |
| Idabel | 3,659 | 3,428 | 3.4 | -8.8 | | | | | |
| Lawton | 45,899 | 40,531 | -5.2 | -6.9 | **Total** | 1,082,143 | 974,762 | -3.1 | -6.5 |

## RETAIL TRADE IN METRO AREAS AND STATE
($000)

| | | | | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | Jan. '89 | Jan. '88 | Dec. '88/Jan. '89 | | Jan. '89/'88 | Jan./Dec. '89/'88 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| **OKLAHOMA CITY MSA** | | | | | | | |
| Food Group | 197,576 | 189,742 | 209,373 | 186,520 | 4.1 | -5.6 | -13.9 |
| Apparel | 14,051 | 14,843 | 14,685 | 11,208 | -5.3 | -4.3 | -57.4 |
| General Merchandise Group | 64,962 | 73,192 | 69,061 | 50,106 | -11.2 | -5.9 | -59.9 |
| Furniture Group | 25,338 | 18,471 | 35,070 | 23,220 | 37.2 | -27.8 | -49.0 |
| Lumber Group | 15,562 | 13,355 | 17,156 | 10,610 | 16.5 | -9.3 | -20.4 |
| Auto Dealers | 156,695 | 162,664 | 155,487 | 147,104 | -3.7 | 0.8 | 1.3 |
| Gasoline | 17,280 | 15,931 | 18,493 | 17,099 | 8.5 | -6.6 | -6.9 |
| All Other | 64,157 | 70,707 | 74,967 | 50,538 | -9.3 | -14.4 | -53.9 |
| Total | 555,621 | 558,905 | 594,292 | 496,405 | -0.6 | -6.5 | -29.1 |
| **TULSA MSA** | | | | | | | |
| Food Group | 112,570 | 111,175 | 118,385 | 105,480 | 1.3 | -4.9 | -17.0 |
| Apparel | 11,926 | 16,971 | 13,574 | 9,891 | -29.7 | -12.1 | -59.3 |
| General Merchandise Group | 56,999 | 65,653 | 67,465 | 42,625 | -13.2 | -15.5 | -62.3 |
| Furniture Group | 13,212 | 11,258 | 14,002 | 13,597 | 17.4 | -5.6 | -31.9 |
| Lumber Group | 13,781 | 10,211 | 13,039 | 10,164 | 35.0 | 5.7 | -13.2 |
| Auto Dealers | 91,173 | 94,645 | 90,470 | 85,592 | -3.7 | 0.8 | 1.3 |
| Gasoline | 14,197 | 13,089 | 15,194 | 14,048 | 8.5 | -6.6 | -6.9 |
| All Other | 11,611 | 8,864 | 22,988 | 11,456 | 31.0 | -49.5 | -43.0 |
| Total | 325,469 | 331,866 | 355,117 | 292,853 | -1.9 | -8.3 | -29.6 |
| **ENID MSA** | | | | | | | |
| Food Group | 9,307 | 9,211 | 9,987 | 9,049 | 1.0 | -6.8 | -14.8 |
| Apparel | 1,120 | 1,358 | 1,413 | 976 | -17.5 | -20.7 | -53.9 |
| General Merchandise Group | 4,330 | 5,126 | 4,824 | 3,228 | -15.5 | -10.2 | -63.3 |
| Furniture Group | 1,155 | 1,001 | 2,206 | 1,104 | 15.4 | -47.6 | -59.4 |
| Lumber Group | 1,474 | 1,294 | 1,950 | 1,012 | 13.9 | -24.4 | -29.8 |
| Auto Dealers | 8,968 | 9,310 | 8,899 | 8,419 | -3.7 | 0.8 | 1.3 |
| Gasoline | 1,273 | 1,174 | 1,363 | 1,260 | 8.4 | -6.6 | -6.9 |
| All Other | 3,147 | 3,130 | 2,773 | 2,359 | 0.5 | 13.5 | -50.6 |
| Total | 30,774 | 31,604 | 33,415 | 27,407 | -2.6 | -7.9 | -31.7 |
| **LAWTON MSA** | | | | | | | |
| Food Group | 15,272 | 16,416 | 17,013 | 14,565 | -7.0 | -10.2 | -13.6 |
| Apparel | 1,947 | 1,742 | 1,925 | 1,525 | 11.8 | 1.1 | -50.5 |
| General Merchandise Group | 11,712 | 13,182 | 12,832 | 8,918 | -11.2 | -8.7 | -60.5 |
| Furniture Group | 2,264 | 2,491 | 2,441 | 2,090 | -9.1 | -7.3 | -28.5 |
| Lumber Group | 1,331 | 1,216 | 1,397 | 1,038 | 9.5 | -4.7 | -8.3 |
| Auto Dealers | 11,952 | 12,406 | 11,859 | 11,220 | -3.7 | 0.8 | 1.3 |
| Gasoline | 869 | 801 | 931 | 860 | 8.5 | -6.7 | -6.9 |
| All Other | 3,156 | 2,775 | 4,455 | 2,440 | 13.7 | -29.2 | -47.7 |
| Total | 48,503 | 51,029 | 52,853 | 42,656 | -5.0 | -8.2 | -32.5 |
| **MUSKOGEE AREA** | | | | | | | |
| Food Group | 11,126 | 11,230 | 12,268 | 10,462 | -0.9 | -9.3 | -14.0 |
| Apparel | 1,930 | 1,608 | 2,175 | 1,592 | 20.0 | -11.3 | -55.8 |
| General Merchandise Group | 3,785 | 4,577 | 4,225 | 2,800 | -17.3 | -10.4 | -64.1 |
| Furniture Group | 1,086 | 976 | 1,693 | 928 | 11.3 | -35.9 | -56.0 |
| Lumber Group | 435 | 327 | 371 | 274 | 33.0 | 17.3 | -8.7 |
| Auto Dealers | 7,539 | 7,828 | 7,480 | 7,076 | -3.7 | 0.8 | 1.3 |
| Gasoline | 1,111 | 1,026 | 1,190 | 1,100 | 8.3 | -6.6 | -6.9 |
| All Other | 2,992 | 3,374 | 3,107 | 1,940 | -11.3 | -3.7 | -50.4 |
| Total | 30,004 | 30,946 | 32,509 | 26,172 | -3.0 | -7.7 | -31.2 |
| **STATE**[a] | | | | | | | |
| **Durable Goods** | 556,029 | 558,251 | 548,306 | 506,860 | -0.4 | 1.4 | -7.3 |
| Auto Dealers | 391,502 | 406,408 | 388,483 | 367,539 | -3.7 | 0.8 | 1.3 |
| Accessory Dealers | 30,505 | 27,228 | 26,102 | 25,126 | 12.0 | 16.9 | -5.7 |
| Total Automotive | 422,007 | 433,636 | 414,585 | 392,665 | -2.7 | 1.8 | 0.8 |
| Furniture | 32,082 | 26,243 | 35,791 | 30,937 | 22.2 | -10.4 | -24.1 |
| Household Appliances | 19,445 | 22,640 | 21,295 | 17,949 | -14.1 | -8.7 | -31.7 |
| Total Furniture and Appliances | 51,527 | 48,883 | 57,086 | 48,886 | 5.4 | -9.7 | -27.0 |
| Lumber and Building Materials | 54,265 | 42,451 | 53,176 | 38,488 | 27.8 | 2.0 | -12.1 |
| Hardware Stores | 6,104 | 5,932 | 6,179 | 4,764 | 2.9 | -1.2 | -30.5 |
| Total Lumber, Building Materials & Hardware | 60,369 | 48,333 | 59,355 | 43,252 | 24.8 | 1.7 | -14.6 |
| **Nondurable Goods** | 899,001 | 880,810 | 948,990 | 803,159 | 2.1 | -5.3 | -31.5 |
| Apparel | 48,950 | 54,965 | 53,792 | 39,637 | -10.9 | -9.0 | -56.1 |
| Drug Stores | 46,135 | 42,165 | 44,698 | 41,753 | 9.4 | 3.2 | -27.7 |
| Eating and Drinking Places | 164,170 | 162,491 | 177,028 | 144,179 | 1.0 | -7.3 | -13.9 |
| Food Group | 348,655 | 359,722 | 383,296 | 339,356 | -3.1 | -9.0 | -16.0 |
| Gasoline | 56,746 | 52,311 | 60,734 | 56,151 | 8.5 | -6.6 | -6.9 |
| General Merchandise Group | 171,013 | 145,565 | 175,282 | 129,863 | 17.5 | -2.4 | -58.4 |
| **Total Retail Trade** | 1,455,030 | 1,439,061 | 1,497,296 | 1,309,839 | 1.1 | -2.8 | -23.8 |

Note: *Titles* of classes of business have been changed to more accurately describe coverage. *No change* in data presented. Food Group includes Eating and Drinking Places, General Merchandise Group includes Drug Stores, Furniture includes Household Appliances, Lumber includes Building Materials and Hardware.

[a] Total includes data for categories not shown in the table.

## ENID AND LAWTON MSAs
## MUSKOGEE MA

| Category | Jan. '89 | Jan. '88 | Dec. '88 | Percentage Change<br>Jan. '89/'88 | Percentage Change<br>Jan./Dec. '89/'88 |
|---|---|---|---|---|---|
| **ENID MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 28,550 | 29,575 | 28,325 | -3.5 | 0.8 |
| Total Employment | 26,825 | 27,550 | 27,050 | -2.6 | -0.8 |
| Unemployment Rate (%) | 6.0 | 6.8 | 5.6 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 00 | 0 | 0.0 | 0.0 | |
| Number of Units | 0 | 0 | 0 | 0.0 | 0.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Number of Units | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 19 | 53 | 20 | -64.2 | -4.5 |
| Industrial ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 0 | 1,206 | 0 | — | 0.0 |
| All Other Nonbuilding ($000) | 6 | 0 | 0 | — | — |
| Total Construction ($000) | 25 | 1,259 | 20 | -98.0 | 25.4 |
| **LAWTON MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 47,650 | 49,325 | 48,650 | -3.4 | -2.1 |
| Total Employment | 45,050 | 46,575 | 46,275 | -3.3 | -2.6 |
| Unemployment Rate (%) | 5.5 | 5.6 | 4.9 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 645 | 1,363 | 466 | -52.7 | 38.4 |
| Number of Units | 6 | 15 | 5 | -60.0 | 20.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Number of Units | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 116 | 0 | 215 | — | -46.0 |
| Industrial ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Institutional ($000) | 0 | 0 | 3,000 | 0.0 | — |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 16 | 364 | 0 | -95.5 | — |
| All Other Nonbuilding ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Total Construction ($000) | 777 | 364 | 3,681 | 113.5 | -78.9 |
| **MUSKOGEE MA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 33,375 | 31,850 | 32,000 | 4.8 | 4.3 |
| Total Employment | 30,500 | 28,600 | 29,475 | 6.6 | 3.5 |
| Unemployment Rate (%) | 8.6 | 10.2 | 7.9 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Number of Units | 0 | 0 | 0 | 0.0 | 0.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Number of Units | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Industrial ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 0 | 0 | 334 | 0.0 | — |
| All Other Nonbuilding ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Total Construction ($000) | 0 | 0 | 334 | 0.0 | — |

Note: Includes revisions.

[a] Civilian Labor Force.

Sources for all tables: Local utilities companies; 10th Federal Reserve Bank, Kansas City; Federal Home Loan Bank of Topeka; Oklahoma Employment Security Commission; United States Department of Commerce, Construction Statistics Division; Oklahoma Department of Transportation, Oklahoma Corporation Commission; Center for Economic and Management Research, College of Business Administration, The University of Oklahoma. The data for all tables were compiled by Marjorie E. Earley, Statistician for CEMR and Brian M. Hickey, Data Analyst.

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**Center for Economic and Management Research**
**University of Oklahoma**
**Norman, Oklahoma 73069**

## OKLAHOMA CITY AND TULSA MSAs

| | | | | Percentage Change | |
|---|---|---|---|---|---|
| Category | Jan. '89 | Jan. '88 | Dec. '88 | Jan. '89/'88 | Jan./Dec. '89/'88 |
| **OKLAHOMA CITY MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 491,300 | 501,700 | 496,800 | -2.1 | -1.1 |
| Total Employment | 465,000 | 469,100 | 473,100 | -0.9 | -1.7 |
| Unemployment Rate (%) | 5.4 | 4.8 | 6.5 | — | — |
| **Mortgage Loans Closed ($000,000)** | NA | 10.3 | 11.7 | — | — |
| **Bank Deposits ($000,000)**[b] | | | | | |
| Demand Deposits | 891 | 845 | 875 | 5.4 | 1.8 |
| Time and Savings Deposits | 1,216 | 1,084 | 1,186 | 12.2 | 2.5 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 7,185 | 4,517 | 8,221 | 59.1 | -12.6 |
| Number of Units | 96 | 65 | 111 | 47.7 | -13.5 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 5,450 | 0 | 0 | — | — |
| Number of Units | 173 | 0 | 0 | — | — |
| Nonresidential | | | | | |
| Commercial ($000) | 3,805 | 6,304 | 3,990 | -39.6 | -4.6 |
| Industrial ($000) | 101 | 2,040 | 0 | -95.0 | — |
| Institutional ($000) | 456 | 0 | 230 | — | 98.3 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 569 | 16,312 | 630 | -96.5 | -9.6 |
| All Other Nonbuilding ($000) | 74 | 16 | 28 | 351.0 | 163.2 |
| Total Construction ($000) | 17,640 | 29,189 | 13,099 | -39.6 | 34.7 |
| **TULSA MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 338,100 | 343,300 | 341,600 | -1.5 | -0.9 |
| Total Employment | 315,000 | 314,400 | 316,700 | 0.2 | -0.5 |
| Unemployment Rate (%) | 6.8 | 8.4 | 7.3 | — | — |
| **Mortgage Loans Closed ($000,000)** | NA | 7.7 | 21.3 | — | — |
| **Bank Deposits ($000,000)**[b] | | | | | |
| Demand Deposits | 952 | 943 | 935 | 1.0 | 1.7 |
| Time and Savings Deposits | 2,074 | 2,198 | 2,121 | -5.6 | -2.2 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 12,208 | 6,234 | 6,595 | 95.8 | 85.1 |
| Number of Units | 150 | 86 | 93 | 74.4 | 61.3 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 63 | 0 | 0 | — | — |
| Number of Units | 2 | 0 | 0 | — | — |
| Nonresidential | | | | | |
| Commercial ($000) | 3,673 | 486 | 1,273 | E | 188.6 |
| Industrial ($000) | 2,074 | 4,130 | 2,017 | -49.8 | 2.8 |
| Institutional ($000) | 939 | 600 | 1,150 | 56.5 | -18.3 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 1,527 | 303 | 13,898 | 404.5 | -89.0 |
| All Other Nonbuilding ($000) | 248 | 91 | 106 | 173.4 | 133.6 |
| Total Construction ($000) | 20,732 | 11,843 | 25,039 | 75.1 | -17.2 |

Note: Includes revisions.

E = Exceeds 600 percent.

[a] Civilian Labor Force.

[b] Total deposits of large commercial banks (accounted for 36 percent of all commercial bank deposits as of December 31, 1987 for Oklahoma City and 50 percent of all commercial bank deposits as of December 31, 1987 for Tulsa).

## CONSTRUCTION, STATE

| | | | | Percentage Change | |
|---|---|---|---|---|---|
| Category | Jan. '89 | Jan. '88 | Dec. '88 | Jan. '89/'88 | Jan./Dec. '89/'88 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 22,586 | 12,902 | 15,795 | 75.1 | 43.0 |
| Number of Units | 293 | 177 | 216 | 65.5 | 35.6 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 5,513 | 95 | 0 | E | — |
| Number of Units | 175 | 5 | 0 | E | — |
| Nonresidential | | | | | |
| Commercial ($000) | 11,187 | 7,993 | 5,942 | 40.0 | 88.3 |
| Industrial ($000) | 2,276 | 8,500 | 2,049 | -73.2 | 11.1 |
| Institutional ($000) | 2,312 | 1,362 | 5,450 | 69.7 | -57.6 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 12,199 | 34,063 | 20,072 | -64.2 | -39.2 |
| All Other Nonbuilding ($000) | 328 | 136 | 138 | 140.7 | 137.4 |
| Total Construction ($000) | 56,400 | 65,050 | 49,447 | -13.3 | 14.1 |

**Note: Includes revisions.**

**E = Exceeds 600 percent.**

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# OKLAHOMA BUSINESS BULLETIN

CENTER FOR ECONOMIC AND MANAGEMENT RESEARCH
COLLEGE OF BUSINESS ADMINISTRATION
THE UNIVERSITY OF OKLAHOMA

SRI

CONGRESSIONAL INFO. SERVICE/SRI
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ISSN 0030-1671

May 1989

VOL. 57, ISSUE 5

## SUMMARY OF INDICATORS

| Category | 2 Mos. '89 | 2 Mos. '88 | Feb. '89 | Percentage Change 2 Mos. '89/'88 | Percentage Change Feb./Jan. '89 |
|---|---|---|---|---|---|
| **Personal Income (Monthly Average)** | | | | | |
| Unadjusted ($000,000) | 3,774 | 3,520 | 3,789 | 7.2 | 0.8 |
| Adjusted for CPI ($000,000) | 3,109 | 3,040 | 3,116 | 2.3 | 0.4 |
| **Crude Oil Production (000 bbl)** | 9,430[a] | 10,028[a] | 9,845[e] | -6.0 | -4.2 |
| **Natural Gas Production (000 mcf)** | 140,456[a] | 186,752[a] | 216,916[e] | -24.8 | -35.3 |
| **Industrial Power Sales (000,000 Kwh)**[b] | 1,425 | 1,357 | 703 | 5.0 | -2.5 |
| **Total Bank Deposits (Monthly Average) ($000,000)**[c] | | | | | |
| Demand | 7,616 | 7,606 | 7,492 | 0.1 | -3.2 |
| Savings | 23,723 | 24,608 | 23,673 | -3.6 | -0.4 |
| **Savings and Loan Associations ($000,000)** | | | | | |
| Assets | 10,776 | 10,200 | 10,701 | 5.6 | -1.4 |
| New Mortgage Loans Closed | 95 | 76 | 34 | 24.8 | -44.0 |
| **Employment** | | | | | |
| Total Labor Force (000)[d] | 1,521.0 | 1,539.7 | 1,517.3 | -1.2 | -0.5 |
| Total Employment (000) | 1,418.4 | 1,422.9 | 1,413.3 | -0.3 | -0.7 |
| Unemployment Rate (%) | 6.7 | 7.6 | 6.9 | — | — |
| **General Business Index** | 95.5 | 95.2 | 94.7 | 0.3 | -1.6 |

Note: Includes revisions. Natural Gas includes casignhead gas.

[a] January data.

[b] Sales of larger privately owned utility companies.

[c] Total deposits of all depository institutions.

[d] Civilian Labor Force.

[e] December data.

## RETAIL TRADE IN SELECTED CITIES
($000)

| City | Feb. '89 Adjusted | Feb. '89 Unadjusted | Adjusted '89/'88 Feb. | Adjusted 1989 Feb./Jan. |
|---|---|---|---|---|
| Ada | 12,512 | 11,189 | -2.4 | -8.5 |
| Altus | 10,934 | 9,595 | -13.6 | -4.3 |
| Alva | 3,442 | 2,999 | -9.4 | -3.8 |
| Anadarko | 4,436 | 3,892 | -6.8 | -4.1 |
| Ardmore | 17,282 | 15,138 | -7.9 | -7.3 |
| Bartlesville | 17,940 | 15,959 | -1.6 | -10.1 |
| Blackwell | 3,032 | 2,650 | -5.7 | -11.1 |
| Broken Arrow | 18,089 | 15,837 | -2.5 | -7.4 |
| Chickasha | 8,218 | 7,169 | -9.7 | -6.6 |
| Clinton | 5,990 | 5,289 | -9.5 | -7.1 |
| Cushing | 4,712 | 4,015 | -7.0 | -9.8 |
| Del City | 9,806 | 8,879 | -3.8 | -8.9 |
| Duncan | 12,948 | 11,595 | -7.3 | -6.8 |
| Durant | 9,052 | 7,969 | -13.8 | -10.2 |
| Edmond | 23,481 | 20,997 | -3.9 | -7.1 |
| Elk City | 6,858 | 5,932 | -8.8 | -7.9 |
| El Reno | 7,355 | 6,455 | -0.9 | -9.7 |
| Guthrie | 4,799 | 4,197 | -7.7 | -5.8 |
| Guymon | 3,679 | 3,218 | -8.3 | -20.5 |
| Henryetta | 4,335 | 3,675 | -6.4 | -4.3 |
| Hobart | 2,140 | 1,940 | -6.2 | -3.2 |
| Holdenville | 2,313 | 2,077 | -9.3 | -9.6 |
| Hugo | 2,544 | 2,332 | -9.4 | -8.6 |
| Idabel | 3,458 | 3,120 | -0.6 | -5.3 |
| Lawton | 43,768 | 39,055 | -6.3 | -4.0 |
| McAlester | 9,047 | 7,768 | -10.2 | -8.1 |
| Miami | 9,598 | 8,480 | -11.5 | -11.0 |
| Midwest City | 32,109 | 28,599 | -10.3 | -5.3 |
| Moore | 10,907 | 9,796 | -20.5 | -9.1 |
| Muskogee | 20,299 | 17,646 | -25.6 | -8.8 |
| Norman | 57,556 | 53,136 | -3.6 | -7.7 |
| Oklahoma City | 267,258 | 229,563 | -2.4 | -4.2 |
| Okmulgee | 4,410 | 4,049 | -6.5 | -16.3 |
| Pauls Valley | 3,348 | 3,092 | -6.5 | -24.8 |
| Pawhuska | 1,596 | 1,440 | 1.2 | -7.1 |
| Ponca City | 15,729 | 13,560 | -1.6 | -5.4 |
| Poteau | 4,115 | 3,701 | -1.8 | -11.8 |
| Sand Springs | 7,890 | 6,589 | -3.3 | -7.0 |
| Sapulpa | 11,494 | 10,291 | -5.1 | -6.8 |
| Seminole | 5,203 | 4,702 | -11.6 | 0.2 |
| Shawnee | 24,383 | 21,420 | -15.5 | -1.7 |
| Stillwater | 22,716 | 19,973 | -7.1 | -7.2 |
| Tahlequah | 7,095 | 6,179 | -5.5 | -2.6 |
| Tulsa | 221,368 | 200,901 | -4.4 | -9.9 |
| Watonga | 1,561 | 1,382 | -4.2 | -8.0 |
| Weatherford | 4,686 | 4,292 | -9.0 | -9.3 |
| Wewoka | 1,026 | 933 | -5.9 | -2.4 |
| Woodward | 9,988 | 8,737 | -9.9 | -11.3 |
| **Total** | **996,505** | **881,402** | **-5.8** | **-7.1** |

## RETAIL TRADE IN METRO AREAS AND STATE
($000)

| | | | | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | 2 Mos. '89 | 2 Mos. '88 | Feb. '89 | | 2 Mos. '89/'88 | Feb./Jan. '89 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| **OKLAHOMA CITY MSA** | | | | | | | |
| Food Group | 392,670 | 381,180 | 195,460 | 183,964 | 3.0 | -0.9 | -1.4 |
| Apparel Group | 27,956 | 29,455 | 13,942 | 10,903 | -5.1 | -0.5 | -2.7 |
| General Merchandise Group | 118,184 | 135,634 | 54,308 | 44,183 | -12.9 | -15.9 | -11.8 |
| Furniture Group | 48,615 | 37,924 | 23,362 | 21,843 | 28.2 | -7.5 | -5.9 |
| Lumber Group | 29,351 | 31,068 | 13,960 | 10,074 | -5.5 | -9.3 | -5.1 |
| Auto Dealers | 280,888 | 310,690 | 130,169 | 126,371 | -9.6 | -13.6 | -14.1 |
| Gasoline | 32,150 | 32,895 | 15,219 | 13,022 | -2.3 | -10.1 | -23.8 |
| All Other | 127,679 | 143,216 | 63,441 | 44,293 | -10.8 | -1.2 | -12.4 |
| Total | 1,057,493 | 1,102,062 | 509,861 | 454,653 | -4.0 | -6.9 | -8.4 |
| **TULSA MSA** | | | | | | | |
| Food Group | 222,649 | 219,475 | 110,378 | 102,062 | 1.4 | -1.7 | -3.2 |
| Apparel Group | 23,752 | 30,694 | 11,838 | 9,090 | -22.6 | -0.6 | -8.1 |
| General Merchandise Group | 107,081 | 117,961 | 50,069 | 38,188 | -9.2 | -12.2 | -10.4 |
| Furniture Group | 25,578 | 23,411 | 12,675 | 11,597 | 9.3 | -1.8 | -14.7 |
| Lumber Group | 25,032 | 22,018 | 11,536 | 8,804 | 13.7 | -14.5 | -13.4 |
| Auto Dealers | 163,435 | 180,773 | 75,738 | 73,528 | -9.6 | -13.6 | -14.1 |
| Gasoline | 26,413 | 27,025 | 12,503 | 10,698 | -2.3 | -10.1 | -23.8 |
| All Other | 21,281 | 20,676 | 11,598 | 9,135 | 2.9 | 19.8 | -20.3 |
| Total | 615,221 | 642,033 | 296,335 | 263,102 | -4.2 | -7.1 | -10.2 |
| **ENID MSA** | | | | | | | |
| Food Group | 18,676 | 18,336 | 9,388 | 8,576 | 1.9 | 1.1 | -5.2 |
| Apparel Group | 2,410 | 2,782 | 1,297 | 1,122 | -13.4 | 16.5 | 15.0 |
| General Merchandise Group | 7,572 | 9,095 | 3,298 | 2,383 | -16.7 | -22.8 | -26.2 |
| Furniture Group | 2,099 | 2,121 | 930 | 917 | -1.0 | -20.5 | -16.9 |
| Lumber Group | 2,778 | 2,603 | 1,316 | 907 | 6.7 | -10.0 | -10.4 |
| Auto Dealers | 16,075 | 17,782 | 7,449 | 7,232 | -9.6 | -13.6 | -14.1 |
| Gasoline | 2,369 | 2,425 | 1,122 | 960 | -2.3 | -10.0 | -23.8 |
| All Other | 6,238 | 6,208 | 3,277 | 2,123 | 0.5 | 10.7 | -10.0 |
| Total | 58,217 | 61,352 | 28,077 | 24,220 | -5.1 | -6.8 | -11.6 |
| **LAWTON MSA** | | | | | | | |
| Food Group | 30,107 | 32,575 | 14,956 | 14,065 | -7.6 | -1.3 | -3.4 |
| Apparel Group | 3,706 | 3,728 | 1,780 | 1,317 | -0.6 | -7.6 | -13.6 |
| General Merchandise Group | 22,929 | 24,239 | 11,419 | 9,537 | -5.4 | -0.8 | 6.9 |
| Furniture Group | 4,471 | 5,042 | 2,218 | 2,112 | -11.3 | -1.6 | 1.1 |
| Lumber Group | 2,621 | 2,847 | 1,294 | 997 | -7.9 | -2.6 | -3.9 |
| Auto Dealers | 21,424 | 23,696 | 9,928 | 9,639 | -9.6 | -13.6 | -14.1 |
| Gasoline | 1,617 | 1,656 | 766 | 655 | -2.3 | -10.1 | -23.8 |
| All Other | 6,711 | 5,871 | 3,306 | 2,722 | 14.3 | -2.9 | 11.6 |
| Total | 93,586 | 99,654 | 45,667 | 41,044 | -6.1 | -4.7 | -3.8 |
| **MUSKOGEE AREA** | | | | | | | |
| Food Group | 22,423 | 21,236 | 11,337 | 10,431 | 5.6 | 2.3 | -0.3 |
| Apparel Group | 3,761 | 3,267 | 1,873 | 1,437 | 15.1 | -0.8 | -9.7 |
| General Merchandise Group | 6,664 | 8,279 | 3,056 | 2,110 | -19.5 | -15.3 | -24.6 |
| Furniture Group | 2,407 | 1,842 | 1,310 | 1,154 | 30.7 | 19.5 | 24.4 |
| Lumber Group | 750 | 723 | 327 | 241 | 3.8 | -22.8 | -12.0 |
| Auto Dealers | 13,516 | 14,952 | 6,263 | 6,079 | -9.6 | -13.7 | -14.1 |
| Gasoline | 2,068 | 2,118 | 980 | 838 | -2.4 | -10.0 | -23.8 |
| All Other | 5,392 | 6,607 | 2,522 | 1,403 | -18.4 | -12.1 | -27.7 |
| Total | 56,981 | 59,024 | 27,668 | 23,693 | -3.5 | -5.6 | -9.5 |
| **STATE**[a] | | | | | | | |
| **Durable Goods** | 1,013,640 | 1,092,251 | 470,619 | 437,947 | -7.2 | -13.3 | -13.6 |
| Auto Dealers | 701,795 | 776,240 | 325,222 | 315,737 | -9.6 | -13.6 | -14.1 |
| Accessory Dealers | 58,229 | 55,230 | 27,613 | 23,146 | 5.4 | -9.8 | -7.9 |
| Total Automotive | 760,024 | 831,470 | 352,835 | 338,883 | -8.6 | -13.3 | -13.7 |
| Furniture | 63,792 | 57,271 | 31,644 | 28,168 | 11.4 | -1.6 | -9.0 |
| Household Appliances | 36,874 | 42,703 | 17,635 | 16,003 | -13.7 | -8.3 | -10.8 |
| Total Furniture and Appliances | 100,666 | 99,974 | 49,279 | 44,171 | 0.7 | -4.1 | -9.6 |
| Lumber and Building Materials | 94,817 | 91,869 | 40,892 | 30,390 | 3.2 | -24.2 | -21.0 |
| Hardware Stores | 11,269 | 11,345 | 5,339 | 4,255 | -0.7 | -10.0 | -10.7 |
| Total Lumber, Building Materials & Hardware | 106,086 | 103,214 | 46,231 | 34,645 | 2.8 | -22.8 | -19.9 |
| **Nondurable Goods** | 1,821,656 | 1,758,061 | 922,565 | 796,336 | 3.6 | 2.6 | -0.8 |
| Apparel | 96,277 | 105,725 | 47,550 | 36,815 | -8.9 | -2.4 | -7.1 |
| Drug Stores | 88,638 | 83,814 | 42,859 | 41,097 | 5.8 | -6.4 | -1.6 |
| Eating and Drinking Places | 325,511 | 317,124 | 161,849 | 146,673 | 2.6 | -1.1 | 1.7 |
| Food Group | 717,540 | 705,345 | 370,012 | 335,725 | 1.7 | 6.5 | -1.1 |
| Gasoline | 105,576 | 108,011 | 49,976 | 42,762 | -2.3 | -10.1 | -23.8 |
| General Merchandise Group | 358,767 | 309,616 | 186,025 | 140,122 | 15.9 | 7.7 | 7.9 |
| **Total Retail Trade** | 2,835,296 | 2,850,312 | 1,393,184 | 1,234,283 | -0.5 | -3.4 | -5.8 |

Note: *Titles* of classes of business have been changed to more accurately describe coverage. *No change* in data presented. Food Group includes Eating and Drinking Places, General Merchandise Group includes Drug Stores, Furniture includes Household Appliances, Lumber includes Building Materials and Hardware.

[a] Total includes data for categories not shown in the table.

## ENID AND LAWTON MSAs
## MUSKOGEE MA

| | | | | Percentage Change | |
|---|---|---|---|---|---|
| Category | 2 Mos. '89 | 2 Mos. '88 | Feb. '89 | 2 Mos. '89/'88 | Feb./Jan. '89 |
| **ENID MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 28,250 | 29,338 | 27,950 | -3.7 | -2.1 |
| Total Employment | 26,538 | 27,350 | 26,250 | -3.0 | -2.1 |
| Unemployment Rate (%) | 6.0 | 6.7 | 6.1 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 0 | 0 | 0.0 | 0.0 | |
| Number of Units | 0 | 0 | 0 | 0.0 | 0.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Number of Units | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 41 | 60 | 22 | -31.2 | 17.6 |
| Industrial ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 0 | 1,206 | 0 | — | 0.0 |
| All Other Nonbuilding ($000) | 6 | 8 | 0 | -22.8 | — |
| Total Construction ($000) | 47 | 1,273 | 22 | -96.3 | -10.4 |
| **LAWTON MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 47,550 | 49,088 | 47,450 | -3.1 | -0.4 |
| Total Employment | 44,962 | 46,275 | 44,875 | -2.8 | -0.4 |
| Unemployment Rate (%) | 5.4 | 5.7 | 5.4 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 1,020 | 2,999 | 375 | -66.0 | -41.9 |
| Number of Units | 11 | 35 | 5 | -68.6 | -16.7 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 160 | 0 | — | 0.0 |
| Number of Units | 0 | 4 | 0 | — | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 284 | 294 | 168 | -3.4 | 44.8 |
| Industrial ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 16 | 0 | 0 | — | — |
| All Other Nonbuilding ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Total Construction ($000) | 1,320 | 3,453 | 543 | -61.8 | -30.1 |
| **MUSKOGEE MA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 32,538 | 31,925 | 31,700 | 1.9 | -5.0 |
| Total Employment | 29,750 | 28,612 | 29,000 | 4.0 | -4.9 |
| Unemployment Rate (%) | 8.5 | 10.3 | 8.5 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Number of Units | 0 | 0 | 0 | 0.0 | 0.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Number of Units | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Industrial ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 0 | 577 | 0 | — | 0.0 |
| All Other Nonbuilding ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Total Construction ($000) | 0 | 577 | 0 | — | — |

Note: Includes revisions.

[a] Civilian Labor Force.

Sources for all tables: Local utilities companies; 10th Federal Reserve Bank, Kansas City; Federal Home Loan Bank of Topeka; Oklahoma Employment Security Commission; United States Department of Commerce, Construction Statistics Division; Oklahoma Department of Transportation, Oklahoma Corporation Commission; Center for Economic and Management Research, College of Business Administration, The University of Oklahoma. The data for all tables were compiled by Marjorie E. Earley, Statistician for CEMR and Brian M. Hickey, Data Analyst.

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**Norman, Oklahoma 73069**

## OKLAHOMA CITY AND TULSA MSAs

| Category | 2 Mos. '89 | 2 Mos. '88 | Feb. '89 | Percentage Change<br>2 Mos. '89/'88 | Percentage Change<br>Feb./Jan. '89 |
|---|---|---|---|---|---|
| **OKLAHOMA CITY MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 490,350 | 500,500 | 489,400 | -2.0 | -0.4 |
| Total Employment | 463,950 | 468,650 | 462,900 | -1.0 | -0.5 |
| Unemployment Rate (%) | 5.4 | 6.4 | 5.4 | — | — |
| **Bank Deposits ($000,000)[b]** | | | | | |
| Demand Deposits | 870 | 828 | 849 | 5.1 | -4.7 |
| Time and Savings Deposits | 1,201 | 1,087 | 1,187 | 10.5 | -2.4 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 13,488 | 13,553 | 6,303 | -0.5 | -12.3 |
| Number of Units | 187 | 199 | 91 | -6.0 | -5.2 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 5,450 | 100 | 0 | E | — |
| Number of Units | 173 | 6 | 0 | E | — |
| Nonresidential | | | | | |
| Commercial ($000) | 6,641 | 7,985 | 2,836 | -16.8 | -25.5 |
| Industrial ($000) | 101 | 2,716 | 0 | -96.3 | — |
| Institutional ($000) | 2,026 | 3,020 | 1,570 | -32.9 | 244.3 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 2,998 | 29,720 | 2,429 | -89.9 | 326.8 |
| All Other Nonbuilding ($000) | 168 | 125 | 94 | 34.2 | 27.5 |
| Total Construction ($000) | 30,872 | 57,218 | 13,232 | -46.0 | -25.0 |
| **General Business Index** | 94.4 | 92.1 | 94.9 | 2.5 | 1.0 |
| **TULSA MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 338,250 | 342,700 | 338,400 | -1.3 | 0.1 |
| Total Employment | 314,050 | 314,150 | 313,100 | 0.0 | -0.6 |
| Unemployment Rate (%) | 7.1 | 8.3 | 7.5 | — | — |
| **Bank Deposits ($000,000)[b]** | | | | | |
| Demand Deposits | 938 | 908 | 923 | 3.3 | -2.9 |
| Time and Savings Deposits | 2,075 | 2,186 | 2,076 | -5.1 | 0.1 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 22,779 | 13,934 | 10,570 | 63.5 | -13.4 |
| Number of Units | 276 | 188 | 126 | 46.8 | -16.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 63 | 138 | 0 | -54.2 | — |
| Number of Units | 2 | 6 | 0 | -66.7 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 6,038 | 1,311 | 2,364 | 360.6 | -35.6 |
| Industrial ($000) | 6,282 | 4,214 | 4,208 | 49.1 | 102.9 |
| Institutional ($000) | 939 | 600 | 0 | 56.5 | — |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 3,876 | 6,818 | 2,349 | -43.2 | 53.9 |
| All Other Nonbuilding ($000) | 325 | 248 | 77 | 30.9 | -68.9 |
| Total Construction ($000) | 40,301 | 27,262 | 19,569 | 47.8 | -5.6 |
| **General Business Index** | 90.8 | 87.1 | 90.5 | 4.1 | -0.6 |

Note: Includes revisions.

E = Exceeds 600 percent.

[a] Civilian Labor Force.

[b] Total deposits of large commercial banks (accounted for 36 percent of all commercial bank deposits as of December 31, 1987 for Oklahoma City and 50 percent of all commercial bank deposits as of December 31, 1987 for Tulsa).

## CONSTRUCTION, STATE

| Category | 2 Mos. '89 | 2 Mos. '88 | Feb. '89 | Percentage Change<br>2 Mos.'89/'88 | Percentage Change<br>Feb./Jan. '89 |
|---|---|---|---|---|---|
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 41,381 | 33,347 | 18,795 | 24.1 | -16.8 |
| Number of Units | 535 | 463 | 242 | 15.6 | -17.4 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 5,513 | 593 | 0 | E | — |
| Number of Units | 175 | 23 | 0 | E | — |
| Nonresidential | | | | | |
| Commercial ($000) | 19,046 | 11,350 | 7,859 | 67.8 | -29.7 |
| Industrial ($000) | 6,677 | 10,392 | 4,401 | -35.7 | 93.4 |
| Institutional ($000) | 3,899 | 4,382 | 1,588 | -11.0 | -31.3 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 33,106 | 60,497 | 20,907 | -45.3 | 71.4 |
| All Other Nonbuilding ($000) | 505 | 425 | 177 | 18.7 | -46.0 |
| Total Construction ($000) | 110,127 | 120,987 | 53,727 | -9.0 | -4.7 |

**Note: Includes revisions.**

**E = Exceeds 600 percent.**

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# OKLAHOMA BUSINESS BULLETIN

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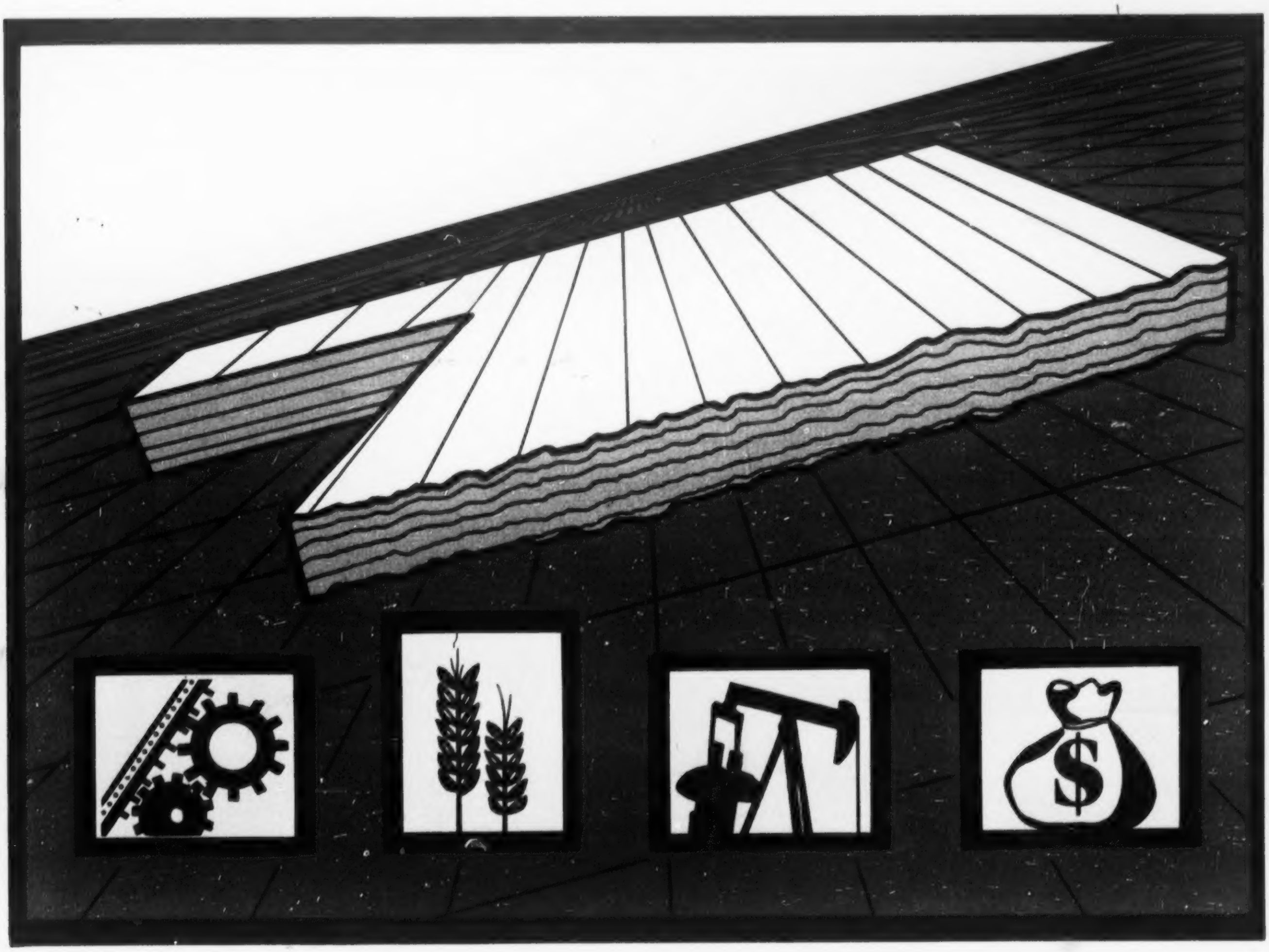

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## SUMMARY OF INDICATORS

| | | | | Percentage Change | |
|---|---|---|---|---|---|
| Category | 3 Mos. '89 | 3 Mos. '88 | Mar. '89 | 3 Mos. '89/'88 | Mar./Feb. '89 |
| **Personal Income (Monthly Average)** | | | | | |
| Unadjusted ($000,000) | 3,790 | 3,536 | 3,820 | 7.2 | 0.8 |
| Adjusted for CPI ($000,000) | 3,114 | 3,046 | 3,123 | 2.2 | 0.2 |
| **Crude Oil Production (000 bbl)**[a] | 17,522 | 20,056 | 7,810 | -12.6 | -19.6 |
| **Natural Gas Production (000 mcf)**[a] | 303,070 | 360,256 | 120,446 | -15.9 | -34.0 |
| **Industrial Power Sales (000,000 Kwh)**[b] | 2,106 | 2,022 | 665 | 4.2 | -0.4 |
| **Total Bank Deposits (Monthly Average) ($000,000)**[c] | | | | | |
| Demand | 7,549 | 7,561 | 7,415 | -0.2 | -1.0 |
| Savings | 23,683 | 24,613 | 23,602 | -3.8 | -0.3 |
| **Savings and Loan Associations ($000,000)** | | | | | |
| Assets | 10,804 | 7,980 | 10,861 | 35.4 | 1.5 |
| Mortgage Loans Closed | 137 | 113 | 42 | 3.3 | 24.8 |
| **General Business Index** | 95.0 | 90.9 | 96.2 | 4.6 | 1.4 |

Note: Includes revisions.

[a] Two months and February data. Natural gas includes casinghead gas.

[b] Sales of larger privately owned utility companies.

[c] Total deposits of all depository institutions.

## SELECTED ECONOMIC INDICATORS

| | | | | Percentage Change | |
|---|---|---|---|---|---|
| Category | 3 Mos. '89 | 3 Mos. '88 | Mar. '89 | 3 Mos. '89/'88 | Mar./Feb. '89 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 63,915 | 63,558 | 22,534 | 0.6 | 19.9 |
| Number of Units | 820 | 853 | 285 | -3.9 | 17.8 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 5,513 | 1,809 | 0 | 204.8 | 0.0 |
| Number of Units | 175 | 89 | 0 | 96.6 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 28,083 | 22,400 | 9,037 | 25.4 | 15.0 |
| Industrial ($000) | 7,239 | 10,452 | 562 | -30.7 | -87.2 |
| Institutional ($000) | 4,284 | 8,359 | 385 | -48.7 | -75.7 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 47,621 | 84,782 | 14,515 | -43.8 | -30.6 |
| All Other Nonbuilding ($000) | 897 | 1,305 | 392 | -31.3 | 121.0 |
| Total Construction ($000) | 157,552 | 192,665 | 47,425 | -18.2 | -11.7 |
| **EMPLOYMENT TRENDS** | | | | | |
| Total Labor Force (000)[a] | 1,513.5 | 1,534.3 | 1,498.4 | -1.4 | -1.2 |
| Total Employment (000) | 1,412.3 | 1,420.7 | 1,400.1 | -0.6 | -0.9 |
| Unemployment Rate (%) | 6.7 | 7.4 | 6.6 | — | — |
| Wage and Salary Employment | 1,131.3 | 1,116.2 | 1,137.7 | 1.4 | 0.6 |
| Manufacturing (000) | 163.2 | 159.7 | 162.8 | 2.2 | -0.3 |
| Mining (000) | 43.8 | 45.5 | 43.7 | -3.7 | 0.9 |
| Government (000) | 252.5 | 250.4 | 255.7 | 0.8 | 0.7 |
| Contract Construction (000) | 31.6 | 32.6 | 32.6 | -3.1 | 4.8 |
| Services (000) | 247.8 | 239.2 | 249.3 | 3.6 | 0.5 |
| Retail Trade (000) | 214.4 | 208.9 | 215.5 | 2.6 | 1.1 |
| **Average Weekly Hours** | | | | | |
| Manufacturing (Per Worker) | 40.8 | 40.8 | 40.5 | 0.0 | -1.5 |
| **Average Weekly Earnings** | | | | | |
| Manufacturing ($ Per Worker) | 432.28 | 418.28 | 432.54 | 3.3 | -0.2 |
| Contract Construction ($ Per Worker) | 414.70 | 407.66 | 423.26 | 1.7 | 8.8 |
| Retail Trade ($ Per Worker)[b] | 189.31 | 185.61 | 189.11 | 2.0 | 0.2 |

Note: Includes revisions in some previous months.

[a] Civilian Labor Force. Labor Force Employment and unemployment rate refer to place of residence, nonagricultural wage and salary employment refer to place of work.

## RETAIL TRADE IN METRO AREAS AND STATE
($000)

|  |  |  |  |  | Percentage Change |  |  |
|---|---|---|---|---|---|---|---|
|  | 3 Mos. '89 | 3 Mos. '88 | Mar. '89 |  | 3 Mos. '89/'88 | Mar./Feb. '89 |  |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| **OKLAHOMA CITY MSA** |  |  |  |  |  |  |  |
| Food Group | 595,435 | 570,627 | 202,322 | 204,126 | 4.3 | 3.3 | 11.0 |
| Apparel Group | 42,739 | 46,038 | 14,631 | 14,986 | -7.2 | 4.1 | 37.4 |
| General Merchandise Group | 191,226 | 191,540 | 72,756 | 67,441 | -0.2 | 34.3 | 52.6 |
| Furniture Group | 73,430 | 56,843 | 24,647 | 21,137 | 29.2 | 4.1 | -3.2 |
| Lumber Group | 42,487 | 44,621 | 13,347 | 12,976 | -4.8 | -4.4 | 28.8 |
| Auto Dealers | 424,547 | 436,855 | 141,288 | 120,541 | -2.8 | 7.8 | -4.6 |
| Gasoline | 54,044 | 49,951 | 21,943 | 19,138 | 8.2 | 48.5 | 47.0 |
| All Other | 191,429 | 204,714 | 63,015 | 59,979 | -6.5 | 0.6 | 35.4 |
| Total | 1,615,337 | 1,601,189 | 553,949 | 520,324 | 0.9 | 8.6 | 14.4 |
| **TULSA MSA** |  |  |  |  |  |  |  |
| Food Group | 340,975 | 329,560 | 117,295 | 117,851 | 3.5 | 5.6 | 15.5 |
| Apparel Group | 36,423 | 44,202 | 12,525 | 12,512 | -17.6 | 5.0 | 37.6 |
| General Merchandise Group | 167,841 | 174,080 | 60,466 | 59,737 | -3.6 | 21.6 | 56.4 |
| Furniture Group | 38,172 | 40,142 | 12,628 | 11,188 | -4.9 | -0.1 | -3.5 |
| Lumber Group | 36,223 | 32,486 | 11,264 | 10,787 | 11.5 | -2.1 | 22.5 |
| Auto Dealers | 247,023 | 254,182 | 82,208 | 70,136 | -2.8 | 7.8 | -4.6 |
| Gasoline | 44,401 | 41,038 | 18,028 | 15,723 | 8.2 | 48.5 | 47.0 |
| All Other | 28,433 | 30,672 | 9,365 | 8,569 | -7.3 | -4.6 | -6.2 |
| Total | 939,491 | 946,362 | 323,779 | 306,503 | -0.7 | 9.7 | 16.5 |
| **ENID MSA** |  |  |  |  |  |  |  |
| Food Group | 28,623 | 26,513 | 9,813 | 9,790 | 8.0 | 3.6 | 14.2 |
| Apparel Group | 3,992 | 4,132 | 1,558 | 1,512 | -3.4 | 17.1 | 34.8 |
| General Merchandise Group | 12,599 | 13,143 | 5,013 | 4,637 | -4.1 | 53.1 | 94.6 |
| Furniture Group | 3,165 | 3,149 | 1,016 | 972 | 0.5 | 1.0 | 6.0 |
| Lumber Group | 4,265 | 3,819 | 1,480 | 1,375 | 11.7 | 12.0 | 51.6 |
| Auto Dealers | 24,296 | 25,003 | 8,085 | 6,898 | -2.8 | 7.8 | -4.6 |
| Gasoline | 3,983 | 3,682 | 1,618 | 1,411 | 8.2 | 48.6 | 47.0 |
| All Other | 9,294 | 9,093 | 3,383 | 2,675 | 2.2 | 23.2 | 26.0 |
| Total | 90,217 | 88,534 | 31,966 | 29,270 | 1.9 | 15.2 | 20.4 |
| **LAWTON MSA** |  |  |  |  |  |  |  |
| Food Group | 46,535 | 46,485 | 16,155 | 16,688 | 0.1 | 7.0 | 18.6 |
| Apparel Group | 5,740 | 5,503 | 2,006 | 2,058 | 4.3 | 11.8 | 56.3 |
| General Merchandise Group | 36,076 | 38,900 | 12,625 | 12,085 | -7.3 | 6.6 | 26.7 |
| Furniture Group | 6,874 | 7,169 | 2,381 | 2,332 | -4.1 | 6.3 | 10.4 |
| Lumber Group | 4,104 | 4,426 | 1,453 | 1,448 | -7.3 | 10.7 | 45.2 |
| Auto Dealers | 32,382 | 33,320 | 10,776 | 9,194 | -2.8 | 7.8 | -4.6 |
| Gasoline | 2,719 | 2,514 | 1,105 | 963 | 8.2 | 48.7 | 47.0 |
| All Other | 9,601 | 9,871 | 3,196 | 2,870 | -2.7 | 6.8 | 5.4 |
| Total | 144,031 | 148,188 | 49,697 | 47,638 | -2.8 | 8.0 | 16.1 |
| **MUSKOGEE AREA** |  |  |  |  |  |  |  |
| Food Group | 34,017 | 31,633 | 11,542 | 11,379 | 7.5 | 1.5 | 9.1 |
| Apparel Group | 5,837 | 4,906 | 2,052 | 2,104 | 19.0 | 8.7 | 46.4 |
| General Merchandise Group | 11,323 | 12,398 | 4,553 | 4,346 | -8.7 | 50.1 | 106.1 |
| Furniture Group | 3,689 | 3,207 | 1,275 | 1,082 | 15.0 | -3.0 | -6.2 |
| Lumber Group | 1,097 | 1,104 | 347 | 349 | -0.6 | 5.5 | 44.8 |
| Auto Dealers | 20,428 | 21,023 | 6,798 | 5,798 | -2.8 | 7.8 | -4.6 |
| Gasoline | 3,484 | 3,222 | 1,421 | 1,232 | 8.1 | 49.4 | 47.0 |
| All Other | 7,921 | 9,323 | 2,426 | 2,614 | -15.0 | -9.4 | 86.3 |
| Total | 87,796 | 86,816 | 30,414 | 28,904 | 1.1 | 9.1 | 22.0 |
| **STATE**[a] |  |  |  |  |  |  |  |
| **Durable Goods** | 1,520,906 | 1,562,751 | 501,311 | 441,283 | -2.7 | 5.9 | 0.8 |
| Auto Dealers | 1,060,718 | 1,091,452 | 352,999 | 301,170 | -2.8 | 7.8 | -4.6 |
| Accessory Dealers | 85,528 | 83,542 | 27,278 | 26,933 | 2.4 | -1.0 | 16.4 |
| Total Automotive | 1,146,246 | 1,174,994 | 380,277 | 328,103 | -2.4 | 7.1 | -3.2 |
| Furniture | 92,303 | 89,390 | 29,275 | 28,909 | 3.3 | -6.4 | 2.6 |
| Household Appliances | 55,245 | 62,481 | 18,349 | 17,203 | -11.6 | 3.6 | 7.5 |
| Total Furniture and Appliances | 147,548 | 151,871 | 47,624 | 46,112 | -2.8 | -2.8 | 4.4 |
| Lumber and Building Materials | 137,782 | 134,897 | 44,342 | 41,947 | 2.1 | 11.4 | 38.0 |
| Hardware Stores | 16,801 | 16,818 | 5,601 | 5,500 | -0.1 | 5.1 | 29.3 |
| Total Lumber, Building Materials & Hardware | 154,583 | 151,715 | 49,943 | 47,447 | 1.9 | 10.7 | 37.0 |
| **Nondurable Goods** | 2,763,114 | 2,650,262 | 942,363 | 906,967 | 4.3 | 2.0 | 13.9 |
| Apparel | 147,435 | 160,407 | 50,648 | 51,824 | -8.1 | 5.9 | 40.8 |
| Drug Stores | 133,527 | 125,264 | 44,823 | 44,126 | 6.6 | 4.5 | 7.4 |
| Eating and Drinking Places | 486,997 | 470,781 | 161,853 | 164,728 | 3.4 | 0.1 | 12.3 |
| Food Group | 1,100,871 | 1,061,897 | 383,402 | 375,475 | 3.7 | 3.0 | 11.8 |
| Gasoline | 177,471 | 164,014 | 72,055 | 62,847 | 8.2 | 48.5 | 47.0 |
| General Merchandise Group | 524,853 | 479,980 | 169,156 | 145,643 | 9.3 | -8.2 | 3.9 |
| **Total Retail Trade** | 4,284,020 | 4,213,013 | 1,443,674 | 1,348,250 | 1.7 | 3.3 | 9.2 |

[a] Total includes data for categories not shown in the table.

## RETAIL TRADE IN SELECTED CITIES
($000)

| Retail Trade | 3 Mos. '89 Adjusted | 3 Mos. '88 Adjusted | Mar. '89 Adjusted | Mar. '89 Unadjusted | Percentage Change 3 Mos. '89/'88 Adjusted | Percentage Change Mar./Feb. '89 Adjusted | Percentage Change Mar./Feb. '89 Unadjusted |
|---|---|---|---|---|---|---|---|
| Ada | 40,538 | 39,912 | 14,276 | 13,574 | 1.6 | 14.1 | 21.3 |
| Altus | 34,946 | 36,979 | 12,126 | 11,761 | -5.5 | 7.8 | 22.6 |
| Alva | 10,908 | 11,175 | 3,791 | 3,647 | -2.4 | 8.0 | 21.6 |
| Anadarko | 14,368 | 14,264 | 5,033 | 5,048 | 0.7 | 10.3 | 29.7 |
| Ardmore | 56,205 | 57,524 | 20,073 | 18,161 | -2.3 | 17.7 | 20.0 |
| Bartlesville | 59,297 | 56,384 | 21,407 | 19,797 | 5.2 | 21.5 | 24.0 |
| Blackwell | 9,814 | 10,724 | 3,336 | 3,216 | -8.5 | 9.5 | 21.4 |
| Broken Arrow | 57,462 | 56,061 | 19,502 | 18,834 | 2.5 | 7.1 | 18.9 |
| Chickasha | 26,884 | 27,352 | 9,788 | 9,207 | -1.7 | 21.0 | 28.4 |
| Clinton | 19,409 | 19,635 | 6,797 | 6,193 | -1.2 | 11.6 | 17.1 |
| Cushing | 15,395 | 15,582 | 5,443 | 5,478 | -1.2 | 15.8 | 36.4 |
| Del City | 31,734 | 31,321 | 11,162 | 10,706 | 1.3 | 15.9 | 20.6 |
| Duncan | 41,876 | 42,360 | 14,670 | 14,144 | -1.1 | 12.8 | 22.0 |
| Durant | 30,489 | 32,609 | 11,149 | 10,047 | -6.5 | 21.2 | 26.1 |
| Edmond | 74,011 | 71,896 | 24,926 | 24,489 | 2.9 | 5.4 | 16.6 |
| Elk City | 22,034 | 22,174 | 7,679 | 7,308 | -0.6 | 12.2 | 23.2 |
| El Reno | 23,634 | 21,853 | 8,181 | 7,847 | 8.1 | 13.6 | 21.6 |
| Guthrie | 15,125 | 15,538 | 5,157 | 4,839 | -2.7 | 6.2 | 15.3 |
| Guymon | 13,485 | 13,217 | 5,149 | 4,732 | 2.0 | 40.8 | 47.0 |
| Henryetta | 13,747 | 14,134 | 4,822 | 4,591 | -2.7 | 10.2 | 24.9 |
| Hobart | 6,613 | 6,801 | 2,225 | 2,046 | -2.8 | 2.6 | 5.5 |
| Holdenville | 7,437 | 7,730 | 2,544 | 2,491 | -3.8 | 9.7 | 19.9 |
| Hugo | 8,198 | 8,494 | 2,836 | 2,540 | -3.5 | 10.5 | 8.9 |
| Idabel | 10,784 | 10,508 | 3,623 | 3,519 | 2.6 | 3.9 | 12.8 |
| Lawton | 137,362 | 141,556 | 47,671 | 45,375 | -3.0 | 8.4 | 16.2 |
| McAlester | 28,928 | 30,470 | 9,922 | 9,499 | -5.1 | 8.9 | 22.3 |
| Miami | 31,588 | 33,713 | 11,153 | 10,766 | -6.3 | 17.5 | 27.0 |
| Midwest City | 99,365 | 106,399 | 33,259 | 32,218 | -6.6 | 3.4 | 12.7 |
| Moore | 35,692 | 42,703 | 12,742 | 12,535 | -16.4 | 18.3 | 28.0 |
| Norman | 181,944 | 179,602 | 61,319 | 56,303 | 1.3 | 6.1 | 6.0 |
| Oklahoma City | 823,861 | 809,023 | 275,319 | 255,881 | 1.8 | 2.2 | 11.5 |
| Okmulgee | 15,038 | 15,291 | 5,324 | 5,022 | -1.7 | 20.9 | 24.0 |
| Pauls Valley | 12,430 | 12,203 | 4,703 | 4,256 | 1.9 | 40.7 | 37.6 |
| Pawhuska | 4,812 | 4,865 | 1,517 | 1,380 | -1.1 | -4.2 | -4.2 |
| Ponca City | 50,620 | 49,113 | 17,845 | 16,693 | 3.1 | 12.5 | 23.1 |
| Poteau | 13,559 | 13,271 | 4,706 | 4,399 | 2.2 | 13.3 | 18.9 |
| Sand Springs | 24,901 | 24,564 | 8,515 | 8,294 | 1.4 | 8.6 | 25.9 |
| Sapulpa | 36,349 | 36,327 | 12,296 | 12,044 | 0.1 | 5.6 | 17.0 |
| Seminole | 15,775 | 17,079 | 5,323 | 5,067 | -7.6 | 1.6 | 7.8 |
| Shawnee | 80,636 | 83,220 | 30,948 | 28,491 | -3.1 | 25.6 | 33.0 |
| Stillwater | 72,700 | 74,397 | 25,236 | 22,878 | -2.3 | 10.8 | 14.5 |
| Tahlequah | 21,889 | 22,529 | 7,453 | 7,065 | -2.8 | 4.4 | 14.3 |
| Tulsa | 715,293 | 726,006 | 246,790 | 233,564 | -1.5 | 11.3 | 16.3 |
| Watonga | 5,143 | 5,065 | 1,853 | 1,735 | 1.5 | 16.6 | 25.5 |
| Weatherford | 15,392 | 15,959 | 5,482 | 5,067 | -3.6 | 18.7 | 18.1 |
| Wewoka | 3,138 | 3,164 | 1,054 | 1,013 | -0.8 | 2.3 | 8.6 |
| Woodward | 32,835 | 33,547 | 11,522 | 10,737 | -2.1 | 16.5 | 22.9 |
| **Total Selected Cities** | 3,103,643 | 3,124,293 | 1,067,647 | 1,004,497 | -0.7 | 9.0 | 16.3 |

Sources for all tables: Local utilities companies; 10th Federal Reserve District Member Banks; Federal Home Loan Bank of Topeka; Oklahoma Employment Security Commission; United States Department of Commerce, Construction Statistics Division; Oklahoma Department of Transportation, *Progressive Report of the Transportation Director;* Center for Economic and Management Research, College of Business Administration, The University of Oklahoma. The data for all tables were compiled by Marjorie E. Earley, Statistician for CEMR and Brian Hickey, Research Assistant.

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### EQUAL OPPORTUNITY STATEMENT

This institution in compliance with Title VI and VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and other Federal laws and regulations does not discriminate on the basis of race, color, or national origin, sex, age, religion, handicap, or status as a veteran in any of its policies, practices or procedures. This includes but is not limited to admissions, employment, financial aid, and educational services.

## ENID AND LAWTON MSAs

| Category | 3 Mos. '89 | 3 Mos. '88 | Mar. '89 | Percentage Change<br>3 Mos. '89/'88 | Percentage Change<br>Mar./Feb. '89 |
|---|---|---|---|---|---|
| **ENID MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 28,008 | 29,200 | 27,525 | -4.1 | -1.5 |
| Total Employment | 26,367 | 27,283 | 26,025 | -3.4 | -0.9 |
| Unemployment Rate (%) | 5.8 | 6.5 | 5.4 | — | — |
| Wage and Salary Employment | 21,300 | 21,567 | 21,400 | -1.2 | 1.4 |
| Wholesale and Retail Trade | 5,900 | 6,233 | 5,900 | -5.3 | 0.0 |
| Manufacturing | 1,500 | 1,600 | 1,600 | -6.2 | 14.3 |
| **Industrial Power Sales (000 Kwh)** | 110,593 | 111,629 | 35,820 | -0.9 | -2.3 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 110 | 90 | 110 | 22.2 | — |
| Number of Units | 1 | 1 | 1 | 0.0 | — |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Number of Units | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 557 | 190 | 516 | 193.0 | E |
| Industrial ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 398 | 1,206 | 398 | -66.9 | — |
| All Other Nonbuilding ($000) | 6 | 33 | 0 | -82.2 | 0.0 |
| Total Construction ($000) | 1,071 | 1,519 | 1,024 | -29.5 | E |
| **LAWTON MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 47,542 | 40,117 | 47,525 | -3.2 | 0.2 |
| Total Employment | 44,933 | 46,250 | 44,875 | -2.8 | 0.0 |
| Unemployment Rate (%) | 5.4 | 5.8 | 5.6 | — | — |
| Wage and Salary Employment | 33,600 | 33,900 | 34,000 | -0.9 | 1.8 |
| **Industrial Power Sales (000 Kwh)** | 45,637 | 45,177 | 14,741 | 1.0 | -7.9 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 1,403 | 5,007 | 383 | -72.0 | 2.1 |
| Number of Units | 16 | 64 | 5 | -75.0 | 0.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 180 | 0 | — | 0.0 |
| Number of Units | 0 | 6 | 0 | — | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 384 | 498 | 100 | -22.9 | -40.5 |
| Industrial ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Institutional ($000) | 0 | 1,000 | 0 | — | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 16 | 1,733 | 0 | -99.1 | 0.0 |
| All Other Nonbuilding ($000) | 0 | 0 | 0 | — | 0.0 |
| Total Construction ($000) | 1,803 | 8,418 | 483 | -78.6 | -11.0 |

Note: Includes revisions. [a]Civilian Labor Force. E = Exceeds 600 percent.

## MUSKOGEE MA

| Category | 3 Mos. '89 | 3 Mos. '88 | Mar. '89 | Percentage Change<br>3 Mos. '89/'88 | Percentage Change<br>Mar./Feb. '89 |
|---|---|---|---|---|---|
| **Employment (Number)** | | | | | |
| Labor Force | 32,050 | 31,817 | 31,075 | 0.7 | -2.0 |
| Total Employment | 29,350 | 28,583 | 28,550 | 2.7 | -1.6 |
| Unemployment Rate (%) | 8.4 | 10.1 | 8.1 | — | — |
| **Industrial Power Sales (000 Kwh)** | 41,351 | 43,971 | 14,067 | -6.0 | -2.4 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 0 | 216 | 0 | — | 0.0 |
| Number of Units | 0 | 2 | 0 | — | 0.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Number of Units | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 0 | 400 | 0 | — | 0.0 |
| Industrial ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 0 | 577 | 0 | — | 0.0 |
| All Other Nonbuilding ($000) | 0 | 5 | 0 | — | 0.0 |
| **Total Construction ($000)** | 0 | 1,197 | 0 | — | 0.0 |

Note: Includes revisions.

### TULSA MSA

| Category | 3 Mos. '89 | 3 Mos. '88 | Mar. '89 | Percentage Change | |
|---|---|---|---|---|---|
| | | | | 3 Mos. '89/'88 | Mar./Feb. '89 |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 337,433 | 341,267 | 335,800 | -1.1 | -0.8 |
| Total Employment | 313,433 | 313,367 | 312,200 | 0.0 | -0.3 |
| Unemployment Rate (%) | 7.1 | 8.2 | 7.0 | — | — |
| Wage and Salary Employment | 296,900 | 292,100 | 297,400 | 1.6 | 0.3 |
| Manufacturing | 49,500 | 48,900 | 49,200 | 1.2 | -1.0 |
| Mining | 14,300 | 14,333 | 14,300 | -0.2 | 0.0 |
| Government | 36,900 | 37,367 | 37,200 | -1.2 | 0.3 |
| Wholesale and Retail Trade | 69,700 | 70,033 | 69,900 | -0.4 | 1.4 |
| **Average Weekly Earnings** | | | | | |
| Manufacturing ($ Per Worker) | 437.20 | 451.09 | 430.27 | -3.1 | -1.8 |
| **Industrial Power Sales (000 Kwh)** | 568,753 | 521,960 | 186,479 | 9.0 | -2.0 |
| **Mortgage Loans Closed ($000,000)[b]** | 41 | 46 | 13 | -11.9 | 16.7 |
| **Bank Deposits ($000,000)[c]** | | | | | |
| Demand Deposits | 932 | 894 | 921 | 4.3 | -0.3 |
| Time and Savings Deposits | 2,087 | 2,178 | 2,111 | -4.2 | 1.7 |
| **Air Transportation** | | | | | |
| Passengers Enplaning (Number) | 303,980 | 307,577 | 117,159 | -1.2 | 29.4 |
| Passengers Deplaning (Number) | 306,846 | 308,445 | 115,399 | -0.5 | 26.6 |
| Freight (Tons) | 6,308 | 4,979 | 2,290 | 26.7 | 17.2 |
| **Water Transportation** | | | | | |
| Tulsa Port of Catoosa | | | | | |
| Tons In | 140,347 | 147,300 | 58,656 | -4.7 | 79.7 |
| Tons Out | 362,633 | 365,150 | 80,076 | -0.7 | -41.3 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 32,856 | 24,936 | 10,077 | 31.8 | -4.7 |
| Number of Units | 402 | 324 | 126 | 24.1 | 0.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 63 | 1,238 | 0 | -94.9 | 0.0 |
| Number of Units | 2 | 54 | 0 | -96.3 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 9,654 | 3,154 | 3,617 | 206.1 | 53.0 |
| Industrial ($000) | 6,844 | 4,214 | 562 | 62.4 | -86.6 |
| Institutional ($000) | 939 | 750 | 0 | 25.2 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 7,167 | 18,036 | 3,291 | -60.3 | 40.1 |
| All Other Nonbuilding ($000) | 607 | 851 | 283 | -28.6 | 266.3 |
| Total Construction | 58,130 | 48,179 | 17,829 | 20.7 | -8.9 |
| **General Business Index** | 91.8 | 86.7 | 93.8 | 5.8 | 3.7 |

Note: Includes revisions.

[a] Civilian Labor Force.

[b] By Savings and Loan Associations.

[c] Deposits of large commercial banks (accounted for 54 percent of all commercial bank deposits as of December 31, 1988).

## OKLAHOMA CITY MSA

| Category | 3 Mos. '89 | 3 Mos. '88 | Mar. '89 | Percentage Change<br>3 Mos. '89/'88 | Percentage Change<br>Mar./Feb. '89 |
|---|---|---|---|---|---|
| **Employment (Number)** | | | | | |
| Labor Force[a] | 487,633 | 498,867 | 482,200 | -2.3 | -1.5 |
| Total Employment | 461,533 | 468,033 | 456,700 | -1.4 | -1.3 |
| Unemployment Rate (%) | 5.4 | 6.2 | 5.3 | — | — |
| Wage and Salary Employment | 406,400 | 403,800 | 407,200 | 0.6 | 0.0 |
| Manufacturing | 49,200 | 47,867 | 49,500 | 2.8 | 0.6 |
| Mining | 10,500 | 12,000 | 10,300 | -12.5 | -1.0 |
| Government | 99,200 | 96,333 | 99,500 | 3.0 | -0.3 |
| Wholesale and Retail Trade | 100,500 | 99,267 | 100,000 | 1.2 | -0.2 |
| **Average Weekly Earnings** | | | | | |
| Manufacturing ($ Per Worker) | 485.87 | 461.02 | 490.47 | 5.4 | 0.7 |
| **Industrial Power Sales (000 Kwh)** | 296,058 | 281,577 | 99,032 | 5.1 | -0.6 |
| **Mortgage Loans Closed ($000,000)[b]** | 27 | 22 | 9 | 22.7 | 70.4 |
| **Bank Deposits ($000,000)[c]** | | | | | |
| Demand Deposits | 843 | 807 | 790 | 4.5 | -6.9 |
| Time and Savings Deposits | 1,181 | 1,093 | 1,140 | 8.0 | -3.9 |
| **Air Transportation** | | | | | |
| Passengers Enplaning (Number) | 336,490 | 329,717 | 133,172 | 2.0 | 33.6 |
| Passengers Deplaning (Number) | 340,779 | 337,380 | 131,576 | 1.0 | 32.9 |
| Freight Enplaned (Tons) | 1,886 | 1,394 | 487 | 35.3 | -34.2 |
| Freight Deplaned (Tons) | 2,415 | 2,261 | 755 | 6.8 | -14.7 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 23,781 | 27,847 | 10,293 | -14.6 | 63.3 |
| Number of Units | 316 | 388 | 129 | -18.6 | 41.8 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 5,450 | 100 | 0 | E | 0.0 |
| Number of Units | 173 | 6 | 0 | E | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 10,289 | 14,368 | 3,648 | -28.4 | 28.6 |
| Industrial ($000) | 101 | 2,716 | 0 | -96.3 | 0.0 |
| Institutional ($000) | 2,346 | 4,726 | 320 | -50.4 | -79.6 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 4,666 | 35,164 | 1,668 | -86.7 | -31.3 |
| All Other Nonbuilding ($000) | 248 | 350 | 81 | -29.1 | -14.2 |
| Total Construction ($000) | 46,881 | 85,272 | 16,009 | -45.0 | 21.0 |
| **General Business Index** | 95.0 | 90.9 | 96.2 | 4.6 | 1.4 |

Note: Includes revisions.

[a] Civilian Labor Force.

[b] By Savings and Loan Associations.

[c] Deposits of large commercial banks (accounted for 36 percent of all commercial bank deposits as of December 31, 1988).

E = Exceeds 600 percent.

# Business Highlights

## DAVID PENN

THE PACE OF OKLAHOMA'S economic recovery slowed somewhat during the 1st quarter of 1989: several indicators of industrial production and consumer spending experienced gains during the period, but the increases generally were lower than occurred from 1st quarter 1987 to 1st quarter 1988.

The slowdown in the rate of recovery of the state's economy probably can be attributed to weakness in the U.S. economy as evidenced by higher interest rates and flat national retail sales. Pushed upward by a tight money policy, interest rates were much higher in the 1st quarter of 1989 than one year earlier: rates on three-month Treasury bills rose from an average of 5.8 percent in 1st quarter 1988 to 8.5 percent in 1st quarter 1989. In addition, seasonally adjusted retail sales on the national level actually declined from January to March 1989 by 0.4 percent. Though these trends usually suggest a recession in the near future, a soft-landing for the U.S. economy may well be the more likely outcome.

A portion of the slower economic pace in the state was due to a diminished rate of growth of wage and salary employment of 1.4 percent, compared with a 1.6 percent gain one year earlier. While the rate of wage and salary employment growth slowed, it nonetheless continued the expansion in the number of payroll jobs that began in 1988. The weakest sector of payroll employment continued to be the mining and construction sectors with employment falling by 3.7 percent and 3.1 percent, respectively.

The manufacturing sector continued to show sizable gains with employment rising by 2.2 percent, a net increase of 3,500 jobs. A large portion of these jobs were generated in the Oklahoma City and Tulsa metropolitan areas. By contrast with Oklahoma, manufacturing employment in the U.S. increased by just 1.6 percent during the same period. The 1st quarter gain of 4.2 percent in industrial power sales also lends support to the notion of a continuing recovery in Oklahoma's manufacturing sector. Much of this gain occurred in the Tulsa and Oklahoma City metropolitan areas which experienced increases of 9 percent and 5.1 percent, respectively. Industrial power sales also rose slightly in the Lawton area but fell in the Enid and Muskogee areas.

Unemployment rates continued to decline in Oklahoma, suggesting a slight tightening of state labor markets. The rate of unemployment fell to an average of 6.7 percent, the lowest level for the 1st quarter since 1982. Unemployment rates also declined in all of the major metropolitan areas of the state.

Retail sales figures for the state suggest a growing degree of caution on the part of consumers. Total sales gained just 1.7 percent from the 1st quarter of 1988, compared with a gain of 5.2 percent from 1st quarter 1987 to the 1st quarter of 1988. Seasonally adjusted auto sales fell by nearly $31 million from one year earlier despite a significant gain in March. Declining sales of household appliances combined with lower auto sales caused sales of durable goods to fall by 2.7 percent from one year earlier.

Buoyed by increased sales of gasoline, general merchandise, and higher sales at drug stores, retail trade of nondurable goods rose by 4.3 percent. However, most of the increase in gasoline sales probably is due to higher prices per gallon rather than an increase in the number of gallons sold.

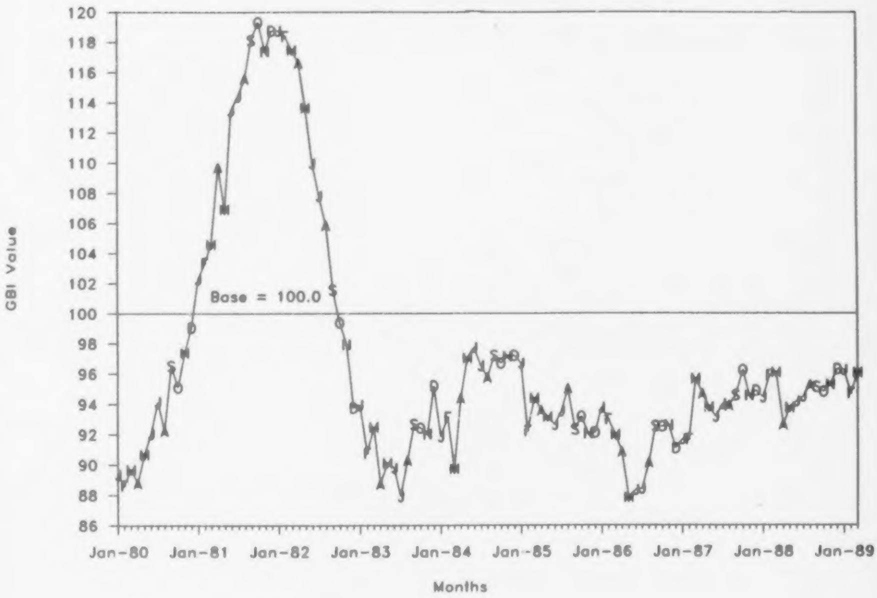
Even though retail sales increased only slowly in Oklahoma, sales by one measure have outpaced those of the U.S. economy. Excluding the volatile auto sector, retail sales in the state economy increased by 2.2 percent from

January to March, compared with a gain of just 0.1 percent in the U.S. economy. Thus, the slowdown in the rate of economic growth seems to have impacted big-ticket auto sales in the retail sector more heavily in the U.S. than in Oklahoma.

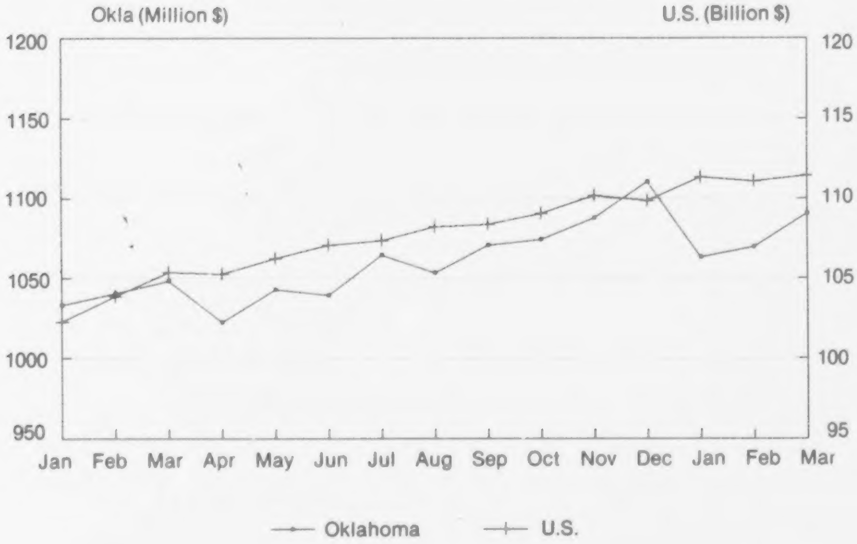
The short-term outlook suggests continued moderate growth rates of payroll employment and manufacturing activity. If interest rates begin to fall, auto sales may also recover, thereby boosting retail sales. Thus, the recovery of Oklahoma's economy will continue, but at a slower pace for the time being. The 4.6 percent gain in the General Business Index suggests that the economy may well gain momentum later in the year.

*David Penn is Assistant Director for the Center for Economic and Management Research.*

**Oklahoma State General Business Index**
**January 1980 through March 1989**



**Seasonally Adjusted**
**Monthly Retail Sales, Excluding Autos**
**U.S. and Oklahoma, 1988 and January-March 1989**



Data: CEMR and U.S. Bureau of Economics Analysis.

# *Oklahoma Banking*
# *1988*

NEIL J. DIKEMAN, JR.

THE BANKING INDUSTRY in Oklahoma has experienced severe problems during at least the past four years and, an examination of the banking industry in other West South Central States (i.e. Arkansas, Louisiana and Texas) revealed that the industry in these states too, had experienced similar problems. For example, bank closings reached epidemic levels in this region between 1985 and 1988 as the total number of banks dropped from 2,897 in the earlier year to 2,584 by the end of 1988. In addition to the decline in banking offices, the market for loans also showed significant losses as did owners' equity and a number of other industry indicators. However, on a more optimistic note, 1988 banking statistics for the area indicated that some improvements in the health of the industry were underway. In an effort to determine how well banks in Oklahoma performed in 1988 relative to the rates of recovery experienced by banks in the remaining West South Central States, changes in various performance and operating indicators of Oklahoma banks between 1987 and 1988 were compared with those of the banks in the remaining three states. In order to eliminate the variations in the populations and numbers of banks which exist among the four states, all comparisons included in the article are based on the "average" bank in each state. In addition to comparisons of changes in key indicators of average banks in the study area, comparisons of changes in the key indicators of the average Oklahoma bank were made with those of the average "high performing" Oklahoma bank. These comparisons are discussed in the remainder of this article.

## Comparative Bank Operations Ratio

The performance of the average bank operation in Oklahoma during 1988 showed several signs of improvement over its 1987 record while the performances of average banks in Arkansas, Louisiana and Texas generally showed less significant signs of improvement. Much of the somewhat better growth rate in Oklahoma is possibly due to its proportionately more severe losses between 1982 and 1987 than was the case in the other states studied which resulted in a lower base from which the Oklahoma growth rate was measured.

Some of the more significant signs of improvement were the growth in average owners' equity in Oklahoma banks which reached 8.3 percent of total liabilities which was the highest among the four states studied. Also, the investment in securities by the average Oklahoma bank rose to 33.5 percent of total assets which was also the highest among the banks in the four State area. While on the one hand, the increase in this performance indicator reflects a greater security and safety in a bank, it also suggests either that the loan market for the bank has become increasingly weaker or that bank management has less confidence in the loan applications it receives than it has had in past years. Regardless of the reasons however, the rise in security investment made by the Oklahoma bank between 1987 and 1988 was accompanied by a decrease in the proportion of funds loaned during 1988 to 47.0 percent of assets which was the lowest of the four states. In a like manner, the loan to deposit ratio of the Oklahoma bank declined from 54.3 percent in 1987 to 53.1 percent in 1988—also the lowest among the four state area.

Total deposits in average banks in both Oklahoma and Arkansas rose between 1987 and 1988 while those in Texas and Louisiana declined.

However, because of the rather significant increase in owners' equity in the average Oklahoma bank, the ratio of total deposits to total liabilities in this bank dropped from 90.5 percent in 1987 to 90.2 percent in 1988. The fact that owners' equity of the average bank in the remaining three states declined resulted in an increase in the ratio of total deposits to total liabilities in these states.

The net results of these changes in the condition of the average bank noted thus far is that the net income of the Oklahoma bank represented 0.4 percent of average assets in 1988 compared with 0.3 percent by the average Arkansas and 0.2 percent for the Louisiana bank and a loss of 0.6 percent by the Texas bank. Details of the data discussed above appear in Table 1.

## Comparative Average Bank Performance Ratios

As was the case with the operations aspects of the average Oklahoma bank, its performance indicators tended to compare very favorably with those of the three comparable states. In 1988, the average Oklahoma bank experienced a net income return on equity of 0.2 percent. However, that of the average Texas bank was nearly 11 percent below owners' equity while that of Louisiana was a negative 7.3 percent and the Arkansas return was a negative 2.6 percent. Roughly, the same pattern was followed by the comparisons of net return on assets where the ratio for Oklahoma showed a return of 0.4 percent whereas the average Arkansas bank showed practically no return (i.e. less than .05 percent) and both Texas and Arkansas banks reflected negative returns.

The average Oklahoma bank also showed up well when comparing the average yield of total assets. In this case, the yield of total assets held by Oklahoma banks of 9.9 percent was second only to the 10.4 yield experienced by the average Arkansas bank and modestly better than the 9.8 and 9.7 percent experienced by average banks in Texas and Louisiana respectively. Insofar as ratio of equity to total assets is concerned, equity of average banks in both Oklahoma and Arkansas were 9.3 percent of total assets while equity levels in Texas and Louisiana banks were 8.2 percent and 8.5 percent respectively.

In other performance indicators, the

**TABLE 1**

**Average Bank Operating Ratios**
**Arkansas, Louisiana, Oklahoma and Texas**
**1987 and 1988**

| | 1987 | | | | 1988 | | | |
|---|---|---|---|---|---|---|---|---|
| | Arkansas | Louisiana | Oklahoma | Texas | Arkansas | Louisiana | Oklahoma | Texas |
| Banks per 100,000 Population | 17.8 | 5.9 | 14.5 | 8.6 | 17.5 | 5.6 | 14.0 | 8.7 |
| Number of Banks | | | | | | | | |
| Number | 426 | 264 | 477 | 1,672 | 423 | 247 | 456 | 1,458 |
| Rank | 3 | 4 | 2 | 1 | 3 | 4 | 2 | 1 |
| Owners Equity Percent of Liabilities | 8.7 | 7.7 | 8.1 | 7.3 | 8.2 | 7.3 | 8.3 | 6.9 |
| Rank | 1 | 3 | 2 | 4 | 3 | 4 | 2 | 1 |
| Total Deposits | | | | | | | | |
| Percent of Liabilities | 88.2 | 90.2 | 90.5 | 90.7 | 89.0 | 90.6 | 90.2 | 91.2 |
| Rank | 4 | 3 | 2 | 1 | 4 | 2 | 3 | 1 |
| Total Securities | | | | | | | | |
| Percent of Assets | 20.5 | 27.8 | 30.9 | 21.1 | 21.6 | 29.4 | 33.5 | 26.2 |
| Rank | 4 | 2 | 1 | 3 | 4 | 2 | 1 | 3 |
| Net Loans | | | | | | | | |
| Percent of Assets | 50.7 | 51.1 | 48.5 | 50.7 | 54.1 | 49.5 | 47.0 | 47.8 |
| Rank | 3 | 1 | 4 | 2 | 1 | 2 | 4 | 3 |
| Net Loans | | | | | | | | |
| Percent of Deposits | 66.5 | 61.3 | 54.3 | 68.1 | 65.3 | 62.5 | 53.1 | 60.6 |
| Rank | 2 | 3 | 4 | 1 | 1 | 2 | 4 | 3 |
| Net Income | | | | | | | | |
| Percent of Assets | -0.2 | -0.6 | -0.1 | -0.5 | 0.3 | 0.2 | 0.4 | -0.6 |
| Rank | 2 | 4 | 1 | 3 | 2 | 3 | 1 | 4 |
| Net Interest Margin | | | | | | | | |
| Percent of Assets | 4.6 | 2.3 | 2.8 | 3.6 | 4.6 | 3.8 | 4.1 | 3.7 |
| Rank | 1 | 4 | 3 | 2 | 1 | 3 | 2 | 4 |

average Oklahoma bank fared less impressively than those discussed thus far as it registered a net equity loss during 1988 of 1.2 percent which was better only than the 3.9 percent equity loss which was sustained by the average bank operation in Louisiana. On the other hand, very little differences were noted in the areas of earning asset yield and net loan yields as in the former indicator, both Oklahoma and Texas banks registered yields of 10.1 percent while the average Arkansas bank registered the highest yield of 10.6 percent and the yield of the Louisiana bank was 10.2 percent. Net loan yields ranged from 11.4 percent (the average Texas bank) to 11.9 percent (the average Arkansas bank) with the yield of the average Oklahoma bank being 11.5 percent. The weakest areas of performance of the average Oklahoma bank were the rates of asset growth (2.5 percent versus 8.0 percent for Arkansas). The average Louisiana bank experienced an asset growth rate of 3.3 percent and a deposit growth rate of 4.4 percent, both of which were well above the rates experienced by the average bank doing business in Oklahoma. Details of these data appear in Table 2.

**TABLE 2**

**Average Bank Performance Ratios**
**Arkansas, Louisiana, Oklahoma and Texas**
**1988**

| | Arkansas | Louisiana | Oklahoma | Texas |
|---|---|---|---|---|
| Percent Return[a] on Equity | -2.6 | -7.3 | 0.2 | -10.7 |
| Rank | 2 | 3 | 1 | 4 |
| Net Profit Margin | 0.02 | -3.73 | 3.11 | -6.04 |
| Rank | 2 | 3 | 1 | 4 |
| Percent Return on Assets | 0.0 | -0.2 | 0.4 | -0.6 |
| Rank | 2 | 3 | 1 | 4 |
| Percent Asset Yield | 10.4 | 9.7 | 9.9 | 9.8 |
| Rank | 1 | 4 | 2 | 3 |
| Percent Equity to Assets | 9.3 | 8.5 | 9.3 | 8.2 |
| Rank | 1 | 3 | 2 | 4 |
| Percent Equity Formation Rate | 33.2 | -3.9 | -1.2 | 4.3 |
| Rank | 1 | 4 | 3 | 2 |
| Percent Earning Asset Yield | 10.6 | 10.2 | 10.1 | 10.1 |
| Rank | 1 | 2 | 3 | 4 |
| Percent Net Loan Yield | 11.9 | 11.6 | 11.5 | 11.4 |
| Rank | 1 | 2 | 3 | 4 |
| Percent Asset Growth | 8.0 | 3.3 | 2.5 | 8.0 |
| Rank | 1 | 3 | 4 | 2 |
| Percent Deposit Growth | 8.8 | 4.4 | 2.9 | 9.5 |
| Rank | 2 | 3 | 4 | 1 |

[a] Net income return.

In summary, the average Oklahoma bank exhibited excellent strength, compared with the remaining three states, in owners' equity both as this indicator relates to liabilities and to assets. Moreover, its portfolio appears to be safer in that securities comprise a bigger share of its assets than do loans. Further, its net income to assets ratio is above those of average banks in the three remaining states and its net interest margin is second only to that experienced by the average bank in Arkansas.

Performancewise, the average Oklahoma bank sustained a larger rate of return on owners' equity and on assets than did the average bank on the three remaining states and also had a larger net profit margin. It performed reasonably well in terms of asset yield and the ratios of equity to assets but exhibited some weakness in earning asset and net loan yields and was well below the experiences of the average banks in the three remaining states insofar as asset and deposit growth rates were concerned. The lag in the rate of deposit growth for the average Oklahoma bank can be attributed in part to the relatively slow growth in personal income which has prevailed in the State during the past five years.

## All Oklahoma Banks
## vs.
## High Performance Banks

For the purpose of this study, high performance banks are the upper 20 percent of the banks in Oklahoma based on return on equity. In 1988, there were 85 banks which fell in this category of which only 12 were located in one of the State's four Metropolitan Statistical Areas. This suggests that, for the most part, the high performing banks are located in smaller communities throughout the State and thus have lower owners' equity levels which allows for higher *rates* of increase to occur. However, despite the fact that the average high performing bank is generally smaller than the average of all banks, its performance ratios are impressive. For example, where the average Oklahoma bank experienced a return on equity in 1988 of 0.2 percent, the average high performing bank showed a near 21 percent return. In addition, the average Oklahoma bank suffered a 1.2 percent decrease in equity formation whereas the average high performing bank increased equity by 13.4 percent. The average high performing bank also showed significantly greater growth rates in assets and deposits and, at the bottom line, had a net profit margin of 15.7 percent which was approximately five times the rate of the average Oklahoma bank. Other rate and ratio comparisons are shown in Table 3.

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*Neil J. Dikeman, Jr. is Director for the Center for Economic and Management Research.*

**TABLE 3**

**Average Bank Performance Ratios**
**All Oklahoma Banks versus High Performance Oklahoma Banks**

| Performance Ratio | All Oklahoma Banks | High Performance[a] Banks |
|---|---|---|
| Percent Return on Equity | 0.2 | 20.8 |
| Percent Return on Assets | 0.4 | 1.8 |
| Percent Asset Yield | 9.9 | 10.9 |
| Percent Equity to Assets | 9.3 | 9.5 |
| Percent Equity Formation Rate | -1.2 | 13.4 |
| Percent Earning Asset Yield | 10.1 | 10.4 |
| Percent Net Loan Yield | 11.5 | 12.1 |
| Percent Asset Growth | 2.5 | 6.8 |
| Percent Deposit Growth | 2.9 | 7.0 |
| Net Profit Margin | 3.1 | 15.7 |

[a] High Performance Banks are defined as the upper 20 percentile of banks based by returns of equity ratios.

# *The Sources of Employment Change in the Oklahoma Economy First through Third Quarters 1988*

DAVID PENN

CHANGES IN EMPLOYMENT in the state's economy from one period to the next are caused by four types of business activity: expansions, contractions, the birth of new businesses, and the death or dormancy of existing businesses. Any employment change in the economy or in any particular industrial sector conceptually can be allocated among these four components.

Unfortunately, such an analysis of the sources of employment change is not possible using traditional published employment data. While a substantial amount of detail is available in published form by month and industrial sector, these data only indicate the net change in employment from period to period. For example, if private sector employment was 844,000 in the first quarter of 1988 and 875,000 in the third quarter, the net change is 31,000 jobs. But which of the above factors contributed to this net change in employment? Was the net employment gain due mainly to the creation of new businesses or did increased hiring by expanding businesses have a greater affect? How many firms cut back on employment and how many jobs were lost due to firms that went out of business?

In cooperation with the Oklahoma Department of Commerce and the Oklahoma Employment Security Commission, the Center for Economic and Management Research has determined the components of payroll employment change in the state's economy for the first three quarters of 1988. The calculations were made possible by access to detailed establishment-level employment data for nearly 70,000 individual private sector employers in the state. By matching employment records from quarter to quarter, each individual business establishment could be classified in terms of the source of the establishment's employment change. The business establishments analyzed in this study are those subject to pay unemployment insurance tax to the State of Oklahoma. These establishments include the vast majority of private sector employment in the state, since most businesses of any size are subject to pay unemployment insurance taxes. Although many proprietorships may not be subject to pay the tax, the total number of employees excluded in this case probably is small.

## Change in Total Payroll Employment

As shown in the graph, expanding establishments generated a large number of new jobs in the Oklahoma economy between the 1st and 3rd quarters of 1988. Expanding establishments created nearly 80,000 jobs from the 1st to 2nd quarters, with an additional increase of 64,000 jobs from the 2nd to 3rd quarters.

These job increases dwarfed the gain in jobs caused by the creation or entry of new businesses in the state's economy. New firms contributed just 7,500 and 6,400 new jobs during the 2nd and 3rd quarters, respectively.

Similarly, the vast bulk of job losses were due to business contractions. Establishments that cut back on employment rolls reduced the number of jobs by 57,500 from the 1st to 2nd quarters and another 60,300 from the 2nd quarter to the 3rd. By contrast, firms that became dormant in the second and third quarters caused payroll employment to fall by only about 4,800 jobs in both the 2nd and 3rd quarters.

To summarize, from the 1st through the 3rd quarters of 1988, expanding businesses in the Oklahoma economy produced more than 144,500 jobs while contracting firms eliminated 118,000 jobs resulting in a net change of employment in continuing business establishments of 26,500. Likewise, jobs generated by new businesses less those lost to dormant businesses equalled 4,100 from the 1st through 3rd quarters. The total net change in employment, then, equals 26,500 plus 4,100, or 30,600 jobs.

## Employment Changes by Major Industrial Sector

As Table 1 shows, the industrial sectors with the largest number of job gains from expanding businesses also experienced the largest number of job losses due to business contractions. The services sectors, for example, gained 41,000 jobs from the 1st through 3rd quarters due to business expansions but lost 34,000 jobs due to contracting businesses.

Interestingly, the construction sector experienced the largest proportional job gains of any industry. Gains due to business expansions plus the entry of new firms produced 13,600 jobs from the 1st to 3rd quarters, equalling 45 percent of 1st quarter employment.

**Change in Private Sector Employment by Source**
**Oklahoma 1st-3rd Quarters**
**1988**

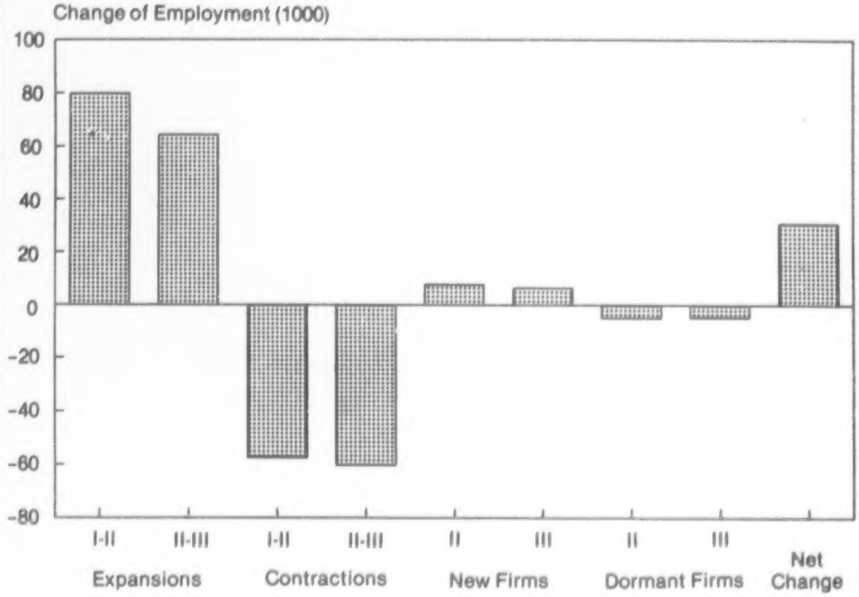

**TABLE 1**

**Private Sector Employment Change in Oklahoma**
**by Source and Industry Division**
**First, Second, and Third Quarters 1988**
**(thousands)**

| | | Source of Employment | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | First Quarter Employment | Expanding Firms | | Contracting Firms | | New Firms | | Dormant Firms | | Net Change | Third Quarter Employment |
| Industry | | I-II | II-III | I-II | II-III | II | III | II | III | I-III | |
| Agriculture | 7.95 | 1.49 | 0.70 | -0.90 | -0.76 | 0.09 | 0.08 | -0.02 | -0.04 | 0.63 | 8.57 |
| Mining | 45.66 | 3.29 | 2.63 | -3.78 | -4.03 | 0.21 | 0.13 | -0.14 | -0.16 | -1.84 | 43.82 |
| Oil and gas | 43.24 | 3.05 | 2.47 | -3.53 | -3.72 | 0.20 | 0.13 | -0.12 | -0.16 | -1.67 | 41.57 |
| Construction | 32.50 | 7.09 | 6.55 | -4.26 | -4.31 | 0.54 | 0.42 | -0.35 | -0.33 | 5.36 | 37.86 |
| Manufacturing | 159.34 | 12.52 | 8.73 | -6.49 | -8.57 | 0.88 | 0.36 | -0.53 | -0.39 | 6.31 | 165.65 |
| Nondurable | 53.56 | 3.09 | 2.58 | -2.10 | -2.62 | 0.27 | 0.07 | -0.12 | -0.09 | 1.09 | 54.65 |
| Durable | 105.78 | 9.44 | 6.15 | -4.39 | -5.95 | 0.40 | 0.28 | -0.41 | -0.30 | 5.22 | 111.00 |
| TCPU[a] | 59.95 | 3.49 | 2.78 | -2.71 | -2.33 | 0.58 | 0.26 | -0.13 | -0.47 | 1.48 | 61.43 |
| Wholesale trade | 59.30 | 5.55 | 4.29 | -3.76 | -4.18 | 0.59 | 0.42 | -0.37 | -0.18 | 2.37 | 61.66 |
| Retail trade | 208.19 | 19.29 | 17.10 | -14.02 | -15.62 | 2.13 | 1.82 | -1.70 | -1.69 | 7.31 | 215.50 |
| FIRE[b] | 58.71 | 3.97 | 3.72 | -3.54 | -4.07 | 0.55 | 0.80 | -0.53 | -0.44 | 0.46 | 59.17 |
| Services | 212.70 | 23.23 | 17.86 | -18.06 | -16.10 | 2.14 | 2.05 | -1.11 | -1.15 | 8.87 | 221.56 |
| Business | 35.69 | 5.78 | 5.89 | -5.35 | -3.31 | 0.43 | 0.22 | -0.12 | -0.23 | 3.31 | 39.01 |
| Health | 73.76 | 4.69 | 3.09 | -4.21 | -3.28 | 0.29 | 0.27 | -0.18 | -0.22 | 0.44 | 74.20 |
| Unclassified | 0.29 | 0.00 | 0.00 | 0.00 | -0.27 | 0.00 | 0.00 | -0.02 | 0.00 | -0.29 | 0.00 |
| TOTAL | 844.59 | 79.92 | 64.36 | -57.51 | -60.26 | 7.52 | 6.35 | -4.89 | -4.84 | 30.64 | 875.23 |

Source: Center for Economic and Management Research.

[a] Transportation, Communications and Public Utilities.

[b] Finance, Insurance and Real Estate.

The largest employment changes occurred among general contractors engaged in the construction, remodeling, and repair of nonresidential buildings other than industrial buildings and warehouses (SIC 1542). This industry gained 2,018 jobs from the 1st to 3rd quarters due to business expansions but also lost 1,275 jobs due to business contractions. Job changes due to the birth of new business and dormancy of existing business nearly cancelled one another (Table 2).

Other construction industries with large proportional employment changes include Highway and Street Construction (SIC 1611), Electrical Work (SIC 1731), Plumbing, Heating, and Air Conditioning (SIC 1711), and Water, Sewer, Pipeline, and Communications (SIC 1623). The number of jobs added by these industries due to business expansions equalled at least one-third of 1st quarter employment. Jobs lost due to contracting businesses also were large when compared with employment in the 1st quarter.

## Employment Changes by Area

Business expansions and contractions were the major contributors to employment changes for the metropolitan areas of the state (Table 3). In the Oklahoma City metropolitan area, business expansions increased employment by an amount equal to 16 percent of 1st quarter employment, while contracting businesses cut back by about 13 percent of 1st quarter employment. Employment gains caused by the birth of new firms equalled less than 2 percent of employment in the 1st quarter of 1988.

## Conclusions

Sources of change of payroll employment from the 1st through 3rd quarters of 1988 were attributed mainly to the effects of business expansions and contractions. The birth of new business firms or the absence of existing firms in Oklahoma appeared to have little impact on employment change during the period.

It should be noted that these results appear to contrast markedly with data published by the U.S. Small Business Administration (SBA). Relying on data managed by Dun and Bradstreet, the SBA estimated that during the period 1980-1986, business births and deaths accounted for a majority of the net increase in jobs in Oklahoma and other states, not expansions and contractions. The difference between the SBA findings and those detailed in this study are probably due to the difference in the time periods anlayzed and also the types of data used. The SBA study covered a very volatile period for the Oklahoma economy during which a relatively large number of business births and deaths might reasonably be expected. By contrast, this study examines the first three quarters of 1988, a period characterized by a significant amount of steady economic recovery for the state's

### TABLE 2

### Sources of Employment Change in Selected Construction Industries First, Second, and Third Quarters 1988

| SIC Code | First Quarter Employment | Source of Employment | | | | | Third Quarter Employment |
|---|---|---|---|---|---|---|---|
| | | Expansions | Contractions | New Firms | Dormant Firms | Net Change | |
| 1542 | 4,197 | 2,018 | (1,275) | 124 | (132) | 735 | 4,933 |
| 1611 | 2,293 | 1,420 | (502) | 22 | (35) | 905 | 3,198 |
| 1731 | 4,306 | 1,190 | (867) | 60 | (61) | 322 | 4,628 |
| 1711 | 4,196 | 980 | (874) | 135 | (71) | 170 | 4,367 |
| 1623 | 2,447 | 837 | (781) | 73 | (23) | 106 | 2,553 |
| 1629 | 1,609 | 811 | (593) | 56 | (10) | 266 | 1,875 |
| 1761 | 1,633 | 802 | (331) | 48 | (59) | 461 | 2,094 |

Source: Center for Economic and Management Research.

SIC Code: 1542 General Contractors — Nonres. Bldg, Ex. Industrial
1611 Highway and Street Construction
1731 Electrical Work
1711 Plumbing, Heating, and Air Conditioning
1623 Water, Sewer, Pipeline, and Communcations Construction
1629 Heavy Construction, Not Elsewhere Classified
1761 Roofing, Siding, and Sheet Metal Work

### TABLE 3

### Private Sector Employment Change in Oklahoma by Area of State First, Second, and Third Quarters 1988 (thousands)

| | | Source of Employment | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | **First Quarter Employment** | **Expanding Firms** | | **Contracting Firms** | | **New Firms** | | **Dormant Firms** | | **Net Change** | **Third Quarter Employment** |
| | | I-II | II-III | I-II | II-III | II | III | II | III | I-III | |
| Oklahoma City MSA | 297.26 | 27.13 | 22.34 | -19.44 | -19.35 | 2.52 | 2.55 | -2.11 | -1.69 | 11.94 | 309.21 |
| Tulsa MSA | 249.78 | 23.60 | 18.45 | -16.51 | -18.52 | 2.09 | 1.49 | -1.38 | -1.25 | 7.97 | 257.74 |
| Comanche County | 21.28 | 1.76 | 1.53 | -1.48 | -1.62 | 0.17 | 0.23 | -0.16 | -0.09 | 0.33 | 21.61 |
| Garfield County | 17.30 | 1.45 | 0.90 | -1.15 | -1.10 | 0.06 | 0.12 | -0.04 | -0.06 | 0.17 | 17.47 |
| Muskogee County | 16.73 | 3.18 | 1.29 | -1.99 | -1.64 | 0.15 | 0.15 | -0.14 | -0.07 | 0.93 | 17.66 |
| Rest of State | 242.25 | 22.81 | 19.85 | -16.93 | -18.03 | 2.53 | 1.80 | -1.06 | -1.68 | 9.29 | 251.54 |
| TOTAL | 844.59 | 79.92 | 64.36 | -57.51 | -60.26 | 7.52 | 6.35 | -4.89 | -4.84 | 30.64 | 875.23 |

economy. Also, the SBA study relied on Dun and Bradstreet data that are sometimes criticized for lack of reliability. The results of this study are qualitatively similar to the results of a similar study in Michigan which found that during the period 1982-1984, business expansions and contractions accounted for most of the net change in payroll employment in the state.[1]

While the preliminary results discussed here indicate that existing businesses play a very important role in explaining net employment changes, generalizations regarding the source of future job growth would be hazardous based on just three quarters of data. Analysis of several additional quarters of employment data will be required before policy conclusions can be made.

## Note

[1] John Case, "The Disciples of David Birch," *INC.*, January 1989.

*David Penn is Assistant Director for the Center for Economic and Management Research.*

*This study was supported by a grant from the Oklahoma Department of Commerce.*

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Norman, Oklahoma 73019-0450

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# OKLAHOMA BUSINESS BULLETIN

CENTER FOR ECONOMIC AND MANAGEMENT RESEARCH
COLLEGE OF BUSINESS ADMINISTRATION
THE UNIVERSITY OF OKLAHOMA

CONGRESSIONAL INFO. SERVICE/SRI
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ISSN 0030-1671

July 1989

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## SUMMARY OF INDICATORS

| Category | 4 Mos. '89 | 4 Mos. '88 | Apr. '89 | Percentage Change 4 Mos. '89/'88 | Percentage Change Apr./Mar. '89/'88 |
|---|---|---|---|---|---|
| **Personal Income (Monthly Average)** | | | | | |
| Unadjusted ($000,000) | 3,802 | 3,602 | 3,837 | 5.6 | 0.4 |
| Adjusted for CPI ($000,000) | 3,116 | 3,097 | 3,117 | 0.6 | 0.4 |
| **Crude Oil Production (000 bbl)**[a] | 27,131 | 30,371 | 9,347 | -10.7 | 16.4 |
| **Natural Gas Production (000 mcf)**[a] | NA | NA | NA | — | — |
| **Industrial Power Sales (000,000 Kwh)**[b] | 2,813 | 2,694 | 320 | 4.4 | 4.9 |
| **Total Bank Deposits (Monthly Average) ($000,000)**[c] | | | | | |
| Demand | 7,529 | 7,575 | 7,469 | -0.6 | 0.7 |
| Savings | 23,648 | 24,588 | 23,544 | 4.8 | -0.2 |
| **Savings and Loan Associations ($000,000)** | | | | | |
| Assets | 10,800 | 8,106 | 10,789 | 33.2 | -0.7 |
| New Mortgage Loans Closed | 173 | 158 | 36 | 9.5 | -14.3 |
| **Employment**[d] | | | | | |
| Total Labor Force (000) | 1,510.5 | 1,530.8 | 1,501.6 | -1.3 | 0.2 |
| Total Employment (000) | 1,413.0 | 1,422.0 | 1,414.8 | -0.6 | 1.0 |
| Unemployment Rate (%) | 6.5 | 7.1 | 5.8 | — | — |
| Wage and Salary Employment (000) | 1,133.4 | 1,119.0 | 1,139.9 | 1.3 | 0.2 |

Note: Includes revisions.
NA = Not Available
[a] Natural Gas includes casinghead gas. Crude oil production: 3 months and March data.
[b] Sales of larger privately owned utility companies.
[c] Total deposits of all depository institutions.
[d] Civilian Labor Force.

## RETAIL TRADE IN SELECTED CITIES
($000)

| City | April '89 Adjusted | April '89 Unadjusted | Adjusted '89/'88 4 Mos. | Adjusted 1989 Apr./Mar. |
|---|---|---|---|---|
| Ada | 13,601 | 13,042 | 1.8 | -4.4 |
| Altus | 11,544 | 11,310 | -4.6 | -4.8 |
| Alva | 3,665 | 3,490 | -1.0 | -2.4 |
| Anadarko | 4,588 | 4,492 | 0.5 | -8.2 |
| Ardmore | 17,983 | 18,094 | -1.7 | -9.9 |
| Bartlesville | 18,918 | 18,107 | 4.6 | -10.8 |
| Blackwell | 3,087 | 3,075 | -6.3 | -7.0 |
| Broken Arrow | 17,863 | 18,457 | 2.8 | -7.4 |
| Chickasha | 8,507 | 8,675 | -0.6 | -12.1 |
| Clinton | 6,107 | 5,928 | 0.0 | -8.8 |
| Cushing | 5,144 | 5,143 | -2.3 | -5.2 |
| Del City | 10,568 | 10,195 | 1.1 | -4.6 |
| Duncan | 13,574 | 13,464 | -2.8 | -6.7 |
| Durant | 9,054 | 9,787 | -4.6 | -19.2 |
| Edmond | 25,975 | 24,322 | 5.4 | 3.7 |
| Elk City | 7,354 | 7,137 | 0.5 | -4.2 |
| El Reno | 7,955 | 7,517 | 8.3 | -2.4 |
| Guthrie | 4,965 | 4,826 | -1.2 | -3.3 |
| Guymon | 4,231 | 4,091 | -0.7 | -17.0 |
| Henryetta | 4,505 | 4,473 | -2.0 | -6.3 |
| Hobart | 2,228 | 2,123 | -1.5 | -0.1 |
| Holdenville | 2,584 | 2,484 | -2.8 | 0.7 |
| Hugo | 2,550 | 2,598 | -1.5 | -9.3 |
| Idabel | 3,667 | 3,542 | 2.3 | 0.8 |
| Lawton | 44,558 | 43,510 | -3.1 | -6.0 |
| McAlester | 9,538 | 9,336 | -3.8 | -4.0 |
| Miami | 11,177 | 10,904 | -3.5 | -0.1 |
| Midwest City | 34,262 | 34,899 | -3.1 | 2.5 |
| Moore | 12,066 | 12,057 | -12.8 | -5.0 |
| Norman | 57,671 | 55,658 | 1.8 | -5.5 |
| Oklahoma City | 254,326 | 254,828 | 2.8 | -6.2 |
| Okmulgee | 4,843 | 4,710 | -2.3 | -8.2 |
| Pauls Valley | 3,531 | 3,579 | -0.9 | -24.9 |
| Pawhuska | 1,546 | 1,625 | -1.7 | 1.8 |
| Ponca City | 16,136 | 16,160 | 2.3 | -9.7 |
| Poteau | 4,534 | 4,247 | 2.7 | -3.4 |
| Sand Springs | 8,483 | 8,692 | 2.5 | -0.7 |
| Sapulpa | 12,539 | 12,415 | 1.6 | 1.2 |
| Seminole | 5,414 | 5,291 | -6.2 | 1.3 |
| Shawnee | 25,741 | 26,109 | 0.4 | -16.8 |
| Stillwater | 24,101 | 23,922 | -0.9 | -4.3 |
| Tahlequah | 7,489 | 7,555 | -0.7 | 0.5 |
| Tulsa | 230,242 | 229,940 | -0.2 | -6.0 |
| Watonga | 1,731 | 1,751 | 5.1 | -5.3 |
| Weatherford | 5,151 | 4,973 | -3.3 | -5.7 |
| Wewoka | 1,039 | 1,015 | -0.8 | -1.3 |
| Woodward | 10,927 | 10,585 | -1.7 | -4.7 |
| **Total** | 997,262 | 990,133 | 0.4 | -5.9 |

## RETAIL TRADE IN METRO AREAS AND STATE
($000)

| | | | | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | 4 Mos. '89 | 4 Mos. '88 | April '89 | | 4 Mos. '89/'88 | April/March '89 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| **OKLAHOMA CITY MSA** | | | | | | | |
| Food Group | 800,349 | 755,901 | 203,997 | 207,433 | 5.9 | 0.5 | 1.6 |
| Apparel | 55,747 | 60,072 | 13,132 | 12,930 | -7.2 | -9.9 | -13.7 |
| General Merchandise Group | 260,426 | 247,506 | 69,542 | 64,298 | 5.2 | -3.0 | -4.7 |
| Furniture & Appliances | 93,179 | 74,977 | 19,982 | 20,074 | 24.3 | -18.6 | -5.0 |
| Lumber & Building Materials | 55,147 | 58,440 | 12,823 | 14,475 | -5.6 | -3.4 | 11.6 |
| Auto Dealers | 544,110 | 559,858 | 124,627 | 116,100 | -2.8 | -9.7 | -3.7 |
| Service Stations | 73,455 | 67,447 | 19,317 | 19,683 | 8.9 | -12.0 | 2.8 |
| All Other | 242,504 | 254,962 | 52,328 | 61,778 | -4.9 | -16.0 | 3.0 |
| Total | 2,124,917 | 2,079,163 | 515,748 | 516,771 | 2.2 | -6.1 | -0.7 |
| **TULSA MSA** | | | | | | | |
| Food Group | 457,210 | 440,422 | 115,793 | 117,521 | 3.8 | -1.5 | -0.3 |
| Apparel | 48,070 | 57,393 | 11,695 | 11,053 | -16.2 | -6.5 | -11.7 |
| General Merchandise Group | 224,080 | 222,797 | 56,829 | 55,400 | 0.6 | -5.5 | -7.3 |
| Furniture & Appliances | 49,760 | 52,173 | 11,824 | 11,724 | -4.6 | -5.2 | 4.8 |
| Lumber & Building Materials | 48,580 | 43,394 | 12,214 | 13,195 | 12.0 | 7.8 | 22.3 |
| Auto Dealers | 316,590 | 325,750 | 72,513 | 67,552 | -2.8 | -9.7 | -3.7 |
| Service Stations | 60,348 | 55,413 | 15,870 | 16,171 | 8.9 | -12.0 | 2.8 |
| All Other | 40,865 | 43,198 | 12,765 | 12,920 | -5.4 | 37.8 | 50.8 |
| Total | 1,245,503 | 1,240,540 | 309,503 | 305,536 | 0.4 | -3.8 | -0.3 |
| **ENID MSA** | | | | | | | |
| Food Group | 38,484 | 37,147 | 9,861 | 9,757 | 3.6 | 1.1 | -0.3 |
| Apparel | 5,204 | 5,442 | 1,244 | 1,340 | -4.4 | -19.9 | -11.4 |
| General Merchandise Group | 16,867 | 17,190 | 4,275 | 4,086 | -1.9 | -14.7 | -11.9 |
| Furniture & Appliances | 4,237 | 4,063 | 1,086 | 1,072 | 4.3 | 6.9 | 10.3 |
| Lumber & Building Materials | 5,685 | 5,076 | 1,430 | 1,536 | 12.0 | -3.0 | 11.7 |
| Auto Dealers | 31,138 | 32,043 | 7,132 | 6,644 | -2.8 | -9.7 | -3.7 |
| Service Stations | 5,414 | 4,971 | 1,424 | 1,451 | 8.9 | -12.0 | 2.8 |
| All Other | 11,627 | 11,262 | 2,545 | 2,996 | 3.2 | -23.9 | 12.0 |
| Total | 118,656 | 117,194 | 28,997 | 28,882 | 1.2 | -8.4 | -1.3 |
| **LAWTON MSA** | | | | | | | |
| Food Group | 61,658 | 62,969 | 15,228 | 15,326 | -2.1 | -5.4 | -8.2 |
| Apparel | 7,164 | 7,275 | 1.425 | 1,553 | -1.5 | -30.7 | -24.5 |
| General Merchandise Group | 48,382 | 50,976 | 12,273 | 11,970 | -5.1 | -3.2 | -1.0 |
| Furniture & Appliances | 8,872 | 9,512 | 2,089 | 2,006 | -6.7 | -9.7 | -14.0 |
| Lumber & Building Materials | 5,492 | 5,871 | 1,402 | 1,552 | -6.5 | -3.0 | 7.2 |
| Auto Dealers | 41,501 | 42,702 | 9,505 | 8,855 | -2.8 | -9.7 | -3.7 |
| Service Stations | 3,696 | 3,394 | 972 | 990 | 8.9 | -12.1 | 2.8 |
| All Other | 13,089 | 12,823 | 3,412 | 3,560 | 2.1 | 5.4 | 24.0 |
| Total | 189,854 | 195,522 | 46,306 | 45,812 | -2.9 | -6.4 | -3.8 |
| **MUSKOGEE AREA** | | | | | | | |
| Food Group | 45,729 | 42,727 | 11,654 | 12,064 | 7.0 | 0.6 | 6.0 |
| Apparel | 7,624 | 6,705 | 1,832 | 1,885 | 13.7 | -9.7 | -10.4 |
| General Merchandise Group | 15,325 | 16,081 | 4,016 | 4,120 | -4.7 | -11.6 | -5.2 |
| Furniture & Appliances | 4,766 | 4,053 | 1,124 | 1,187 | 17.6 | -10.0 | 9.7 |
| Lumber & Building Materials | 1,563 | 1,496 | 448 | 493 | 4.5 | 28.4 | 41.3 |
| Auto Dealers | 26,182 | 26,948 | 5,980 | 5,584 | -2.8 | -9.7 | -3.7 |
| Service Stations | 4,735 | 4,349 | 1,242 | 1,267 | 8.9 | -12.8 | 2.8 |
| All Other | 10,987 | 12,150 | 2,952 | 3,151 | -9.6 | 17.2 | 20.5 |
| Total | 116,911 | 114,509 | 29,248 | 29,751 | 2.1 | -3.5 | 2.9 |
| **STATE**[a] | | | | | | | |
| **Durable Goods** | 1,947,564 | 1,998,204 | 449,202 | 437,839 | -2.5 | -9.0 | -0.8 |
| Auto Dealers | 1,359,435 | 1,398,764 | 311,367 | 290,075 | -2.8 | -9.7 | -3.7 |
| Accessory Dealers | 112,843 | 110,434 | 27,356 | 28,842 | 2.2 | 0.4 | 7.1 |
| Total Automotive | 1,472,278 | 1,509,198 | 338,723 | 318,917 | -2.4 | -9.0 | -2.8 |
| Furniture & Appliances | 121,725 | 114,804 | 29,930 | 27,995 | 6.0 | 2.9 | -3.2 |
| Household Appliances | 72,067 | 81,320 | 17,073 | 16,240 | -11.4 | -6.2 | -5.6 |
| Total Furniture and Appliances | 193,792 | 196,124 | 47,003 | 44,235 | -1.2 | -0.6 | -4.1 |
| Lumber and Building Materials | 179,827 | 178,417 | 42,302 | 47,366 | 0.8 | -3.2 | 12.9 |
| Hardware Stores | 22,755 | 22,366 | 5,920 | 6,925 | 1.7 | 5.2 | 25.9 |
| Total Lumber, Building Materials & Hardware | 202,582 | 200,783 | 48,222 | 54,291 | 0.9 | -2.2 | 14.4 |
| **Nondurable Goods** | 3,695,355 | 3,533,051 | 932,662 | 936,858 | 4.6 | -1.0 | 3.3 |
| Apparel | 193,564 | 207,710 | 46,941 | 45,823 | -6.8 | -6.5 | -11.6 |
| Drug Stores | 173,866 | 164,887 | 41,318 | 41,059 | 5.4 | -6.6 | -7.0 |
| Eating and Drinking Places | 650,464 | 623,092 | 163,204 | 172,997 | 4.4 | 0.7 | 5.0 |
| Food Group | 1,477,760 | 1,423,080 | 377,225 | 375,963 | 3.8 | -1.7 | 0.1 |
| Service Stations | 241,209 | 221,461 | 63,431 | 64,636 | 8.9 | -12.0 | 2.8 |
| General Merchandise Group | 700,473 | 642,516 | 175,738 | 166,790 | 9.0 | 4.0 | 14.5 |
| **Total Retail Trade** | 5,642,919 | 5,531,255 | 1,381,864 | 1,374,697 | 2.0 | -3.7 | 2.0 |

[a] Total includes data for categories not shown in the table.

## ENID AND LAWTON MSAs
## MUSKOGEE MA

|  |  |  |  | Percentage Change |  |
|---|---|---|---|---|---|
| Category | 4 Mos. '89 | 4 Mos. '88 | Apr. '89 | 4 Mos. '89/'88 | Apr./Mar. '89 |
| **ENID MSA** |  |  |  |  |  |
| **Employment (Number)** |  |  |  |  |  |
| Labor Force | 27,875 | 29,088 | 27,475 | -4.2 | -0.2 |
| Total Employment | 26,331 | 27,262 | 26,225 | -3.4 | 0.8 |
| Unemployment Rate (%) | 5.5 | 6.2 | 4.5 | — | — |
| Wage and Salary Employment | 21,275 | 21,525 | 21,200 | -1.2 | -0.9 |
| **PERMIT-AUTHORIZED CONSTRUCTION** |  |  |  |  |  |
| Residential—Single Family |  |  |  |  |  |
| Dollar Value ($000) | 173 | 280 | 63 | -38.2 | -42.7 |
| Number of Units | 2 | 3 | 1 | -33.3 | 0.0 |
| Residential—Multi Family |  |  |  |  |  |
| Dollar Value ($000) | 300 | 0 | 300 | — | — |
| Number of Units | 6 | 0 | 6 | — | — |
| Nonresidential |  |  |  |  |  |
| Commercial ($000) | 900 | 219 | 343 | 311.5 | -33.5 |
| Industrial ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Institutional ($000) | 0 | 300 | 0 | — | 0.0 |
| Nonbuilding |  |  |  |  |  |
| Streets and Highways ($000) | 4,201 | 1,206 | 3,802 | 248.4 | E |
| All Other Nonbuilding ($000) | 57 | 62 | 51 | -7.2 | — |
| Total Construction ($000) | 5,631 | 2,066 | 4,559 | 172.5 | 345.3 |
| **LAWTON MSA** |  |  |  |  |  |
| **Employment (Number)** |  |  |  |  |  |
| Labor Force | 47,675 | 49,050 | 48,075 | -2.8 | 1.2 |
| Total Employment | 45,125 | 46,225 | 45,700 | -2.4 | 1.8 |
| Unemployment Rate (%) | 5.4 | 5.8 | 4.9 | — | — |
| Wage & Salary Employment | 33,700 | 33,900 | 34,000 | -0.6 | 0.0 |
| **PERMIT-AUTHORIZED CONSTRUCTION** |  |  |  |  |  |
| Residential—Single Family |  |  |  |  |  |
| Dollar Value ($000) | 2,724 | 6,162 | 1,321 | -55.8 | 244.9 |
| Number of Units | 25 | 79 | 9 | -68.4 | 80.0 |
| Residential—Multi Family |  |  |  |  |  |
| Dollar Value ($000) | 0 | 180 | 0 | — | 0.0 |
| Number of Units | 0 | 6 | 0 | — | 0.0 |
| Nonresidential |  |  |  |  |  |
| Commercial ($000) | 1,114 | 574 | 730 | 94.1 | E |
| Industrial ($000) | 0 | 40 | 0 | — | 0.0 |
| Institutional ($000) | 0 | 1,300 | 0 | — | 0.0 |
| Nonbuilding |  |  |  |  |  |
| Streets and Highways ($000) | 386 | 1,848 | 370 | -79.1 | — |
| All Other Nonbuilding ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Total Construction ($000) | 4,224 | 10,103 | 2,421 | -58.2 | 401.2 |
| **MUSKOGEE MA** |  |  |  |  |  |
| **Employment (Number)** |  |  |  |  |  |
| Labor Force | 31,862 | 31,769 | 31,300 | 0.3 | 0.7 |
| Total Employment | 29,238 | 28,650 | 28,900 | 2.0 | 1.2 |
| Unemployment Rate (%) | 8.2 | 9.8 | 7.7 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** |  |  |  |  |  |
| Residential—Single Family |  |  |  |  |  |
| Dollar Value ($000) | 0 | 216 | 0 | — | 0.0 |
| Number of Units | 0 | 2 | 0 | — | 0.0 |
| Residential—Multi Family |  |  |  |  |  |
| Dollar Value ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Number of Units | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonresidential |  |  |  |  |  |
| Commercial ($000) | 0 | 400 | 0 | — | 0.0 |
| Industrial ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding |  |  |  |  |  |
| Streets and Highways ($000) | 170 | 577 | 170 | -70.5 | — |
| All Other Nonbuilding ($000) | 0 | 5 | 0 | — | 0.0 |
| Total Construction ($000) | 170 | 1,197 | 170 | -85.8 | — |

Note: Includes revisions. E = Exceeds 600 percent.

Sources for all tables: Local utilities companies; 10th Federal Reserve Bank; Federal Home Loan Bank of Topeka; Oklahoma Employment Security Commission; United States Department of Commerce, Construction Statistics Division; Oklahoma Department of Transportation, Center for Economic and Management Research, College of Business Administration, The University of Oklahoma. The data for all tables were compiled by Marjorie E. Earley, Statistician for CEMR and Brian M. Hickey, Research Assistant.

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**Center for Economic and Management Research**
**University of Oklahoma**
**Norman, Oklahoma 73019-0450**

Association for University Business and Economic Research
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## OKLAHOMA CITY AND TULSA MSAs

| Category | 4 Mos. '89 | 4 Mos. '88 | Apr. '89 | Percentage Change<br>4 Mos. '89/'88 | Percentage Change<br>Apr./Mar. '89 |
|---|---|---|---|---|---|
| **OKLAHOMA CITY MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 487,200 | 497,375 | 485,900 | -2.0 | 0.8 |
| Total Employment | 461,600 | 468,025 | 461,800 | -1.4 | 1.1 |
| Unemployment Rate (%) | 5.3 | 5.9 | 5.0 | — | — |
| Wage and Salary Employment | 406,500 | 404,900 | 406,700 | 0.4 | -0.1 |
| Mortgage Loans Closed ($000,000)[b] | 35 | 29 | 8 | 20.9 | -13.0 |
| **Bank Deposits ($000,000)[c]** | | | | | |
| Demand Deposits | 824 | 801 | 767 | 2.9 | -2.9 |
| Time and Savings Deposits | 1,174 | 1,098 | 1,154 | 6.9 | 1.2 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 35,052 | 37,803 | 11,270 | -7.3 | 9.5 |
| Number of Units | 469 | 528 | 153 | -11.2 | 18.6 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 6,068 | 125 | 618 | E | — |
| Number of Units | 183 | 8 | 10 | E | — |
| Nonresidential | | | | | |
| Commercial ($000) | 12,906 | 17,344 | 2,616 | -25.6 | -28.3 |
| Industrial ($000) | 2,351 | 3,567 | 2,250 | -34.1 | — |
| Institutional ($000) | 2,716 | 5,956 | 370 | -54.4 | 15.6 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 7,112 | 35,272 | 2,447 | -79.8 | 46.7 |
| All Other Nonbuilding ($000) | 527 | 538 | 278 | -2.2 | 244.8 |
| Total Construction ($000) | 66,731 | 100,606 | 19,850 | -33.7 | 24.0 |
| **TULSA MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 336,975 | 339,925 | 335,600 | -0.9 | -0.1 |
| Total Employment | 314,050 | 313,150 | 315,900 | 0.3 | 1.2 |
| Unemployment Rate (%) | 6.8 | 7.9 | 5.9 | — | — |
| Wage and Salary Employment | 297,500 | 292,900 | 299,300 | 1.6 | 0.6 |
| Mortgage Loans Closed ($000,000)[b] | 54 | 65 | 14 | -16.4 | 3.8 |
| **Bank Deposits ($000,000)[c]** | | | | | |
| Demand Deposits | 938 | 892 | 959 | 5.2 | 4.1 |
| Time and Savings Deposits | 2,092 | 2,177 | 2,106 | -3.9 | -0.2 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 46,059 | 34,607 | 13,203 | 33.1 | 31.0 |
| Number of Units | 565 | 448 | 163 | 26.1 | 29.4 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 82 | 1,238 | 19 | -93.4 | — |
| Number of Units | 4 | 54 | 2 | -92.6 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 10,698 | 7,948 | 1,043 | 34.6 | -71.2 |
| Industrial ($000) | 9,374 | 4,631 | 2,530 | 102.4 | 350.2 |
| Institutional ($000) | 8,110 | 1,249 | 7,171 | 549.3 | — |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 11,203 | 14,475 | 4,037 | -22.6 | 22.7 |
| All Other Nonbuilding ($000) | 968 | 1,201 | 361 | -19.4 | 27.7 |
| Total Construction ($000) | 86,495 | 65,348 | 28,365 | 32.4 | 59.1 |

Note: Includes revisions.

E = Exceeds 600 percent.

[a] Civilian Labor Force.

[b] By Savings and Loan Associations.

[c] Total deposits of large commercial banks (accounted for 36 percent of all commercial bank deposits as of December 31, 1988 for Oklahoma City and 50 percent of all commercial bank deposits as of December 31, 1988 for Tulsa).

## CONSTRUCTION, STATE

| Category | 4 Mos. '89 | 4 Mos. '88 | April '89 | Percentage Change<br>4 Mos. '89/'88 | Percentage Change<br>Apr./Mar. '89 |
|---|---|---|---|---|---|
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 92,215 | 86,261 | 27,260 | 6.9 | 15.6 |
| Number of Units | 1,174 | 1,156 | 347 | 1.6 | 18.8 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 6,450 | 2,414 | 937 | 167.2 | — |
| Number of Units | 193 | 144 | 18 | 34.0 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 34,521 | 31,154 | 6,431 | 10.8 | -28.9 |
| Industrial ($000) | 12,049 | 11,948 | 4,810 | 0.8 | E |
| Institutional ($000) | 12,055 | 11,384 | 7,771 | 5.9 | E |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 79,273 | 102,145 | 31,652 | -22.4 | 118.1 |
| All Other Nonbuilding ($000) | 1,648 | 1,885 | 751 | -12.6 | 91.5 |
| Total Construction ($000) | 238,212 | 247,191 | 79,613 | -3.6 | 64.2 |

Note: Includes revisions. E = Exceeds 600 percent.

U8130-1 A

# OKLAHOMA BUSINESS BULLETIN

CENTER FOR ECONOMIC AND MANAGEMENT RESEARCH
COLLEGE OF BUSINESS ADMINISTRATION
THE UNIVERSITY OF OKLAHOMA

CONGRESSIONAL INFO. SERVICE/SRI
ATTN: ROBERTA B. MASON
4520 EAST-WEST HIGHWAY
BETHESDA MD 20814

ISSN 0030-1671

August 1989

VOL. 57, ISSUE 8

## SUMMARY OF INDICATORS

| Category | 5 Mos. '89 | 5 Mos. '88 | May '89 | Percentage Change<br>5 Mos. '89/'88 | Percentage Change<br>May/Apr. '89 |
|---|---|---|---|---|---|
| **Personal Income (Monthly Average)** | | | | | |
| Unadjusted ($000,000) | 3,778 | 3,552 | 3,818 | 6.4 | 0.3 |
| Adjusted for CPI ($000,000) | 3,087 | 3,046 | 3,084 | 1.3 | -0.3 |
| **Crude Oil Production (000 bbl)**[a] | 36,458 | 40,433 | 9,091 | -9.3 | -4.7 |
| **Natural Gas Production (000 mcf)**[a] | NA | NA | NA | — | — |
| **Industrial Power Sales (000,000 Kwh)**[b] | 3,540 | 3,391 | 727 | 4.4 | 2.8 |
| **Total Bank Deposits (Monthly Average) ($000,000)**[c] | | | | | |
| Demand | 7,497 | 7,565 | 7,371 | -0.9 | -1.3 |
| Savings | 23,601 | 24,566 | 23,415 | -3.9 | -0.6 |
| **Savings and Loan Associations ($000,000)** | | | | | |
| Assets | 10,775 | 8,191 | 10,673 | 31.5 | -1.1 |
| Mortgage Loans Closed | 208 | 211 | 35 | -1.3 | -2.5 |
| **Employment** | | | | | |
| Total Labor Force (000)[d] | 1,511.0 | 1,529.5 | 1,513.2 | -1.2 | 0.8 |
| Total Employment (000) | 1,414.9 | 1,421.0 | 1,422.9 | -0.4 | 0.6 |
| Unemployment Rate (%) | 6.4 | 7.1 | 6.0 | — | — |
| Wage and Salary Employment (000) | 1,136.0 | 1,122.5 | 1,146.1 | 1.2 | 0.5 |

Note: Includes revisions.
NA = Not Available

[a] Natural Gas includes casinghead gas. Crude oil production: 4 months and April data.

[b] Sales of larger privately owned utility companies.

[c] Total deposits of all depository institutions.

[d] Civilian Labor Force

## RETAIL TRADE IN SELECTED CITIES
($000)

| | May '89 | | Adjusted | | | May '89 | | Adjusted | |
|---|---|---|---|---|---|---|---|---|---|
| | | | '89/'88 | 1989 | | | | '89/'88 | 1989 |
| City | Adjusted | Unadjusted | 5 Mos. | May/Apr. | City | Adjusted | Unadjusted | 5 Mos. | May/Apr. |
| Ada | 13,382 | 14,077 | 1.8 | -0.7 | Lawton | 43,834 | 45,905 | -3.7 | -1.2 |
| Altus | 11,803 | 12,314 | -2.9 | 2.8 | McAlester | 9,372 | 9,920 | -3.7 | -1.3 |
| Alva | 3,468 | 3,617 | -2.6 | -4.4 | Miami | 10,806 | 11,060 | -3.1 | -2.5 |
| Anadarko | 4,508 | 4,767 | -1.6 | -0.9 | Midwest City | 32,408 | 34,116 | -4.2 | -4.6 |
| Ardmore | 18,258 | 19,059 | -2.2 | 2.3 | Moore | 12,559 | 12,790 | -10.7 | 3.9 |
| Bartlesville | 19,431 | 19,733 | 4.0 | 2.9 | Norman | 57,133 | 58,122 | -0.3 | 0.8 |
| Blackwell | 3,016 | 3,191 | -5.0 | -1.3 | Oklahoma City | 256,010 | 263,990 | 1.2 | 1.2 |
| Broken Arrow | 18,572 | 19,900 | 1.8 | 3.9 | Okmulgee | 4,773 | 5,052 | -3.1 | -0.9 |
| Chickasha | 8,771 | 9,235 | -1.5 | 2.9 | Pauls Valley | 4,047 | 4,107 | -1.9 | 15.2 |
| Clinton | 6,010 | 6,214 | -0.4 | -0.6 | Pawhuska | 1,596 | 1,728 | -1.3 | 2.3 |
| Cushing | 5,098 | 5,487 | -3.3 | -0.7 | Ponca City | 16,665 | 17,517 | 3.7 | 3.2 |
| Del City | 9,799 | 10,902 | -0.9 | -5.7 | Poteau | 4,249 | 4,421 | 0.1 | -5.4 |
| Duncan | 13,026 | 14,215 | -5.5 | -3.2 | Sand Springs | 8,565 | 9,063 | 2.6 | 1.1 |
| Durant | 9,783 | 10,157 | -4.3 | 6.9 | Sapulpa | 12,573 | 13,256 | 1.4 | 0.0 |
| Edmond | 24,904 | 25,492 | 4.7 | -3.2 | Seminole | 5,479 | 5,769 | -5.6 | 1.2 |
| Elk City | 7,301 | 7,593 | 0.6 | -0.1 | Shawnee | 26,822 | 29,069 | 3.1 | 3.9 |
| El Reno | 7,754 | 8,035 | 6.4 | -1.9 | Stillwater | 23,520 | 23,546 | -0.8 | -1.9 |
| Guthrie | 5,905 | 6,481 | 2.8 | 17.6 | Tahlequah | 7,147 | 7,718 | -0.6 | -3.9 |
| Guymon | 4,392 | 4,695 | 1.8 | 3.3 | Tulsa | 235,152 | 239,556 | -0.5 | 2.5 |
| Henryetta | 4,565 | 4,913 | -2.9 | 1.5 | Watonga | 1,686 | 1,746 | 3.7 | -1.9 |
| Hobart | 2,141 | 2,268 | -0.2 | -2.7 | Weatherford | 5,643 | 5,896 | 0.6 | 8.9 |
| Holdenville | 2,489 | 2,598 | -3.9 | -3.4 | Wewoka | 1,014 | 1,086 | -2.9 | -1.9 |
| Hugo | 2,667 | 2,795 | -2.1 | 3.6 | Woodward | 10,862 | 11,420 | -0.8 | 0.1 |
| Idabel | 3,541 | 3,672 | 0.9 | -3.0 | **Total** | 1,002,499 | 1,038,263 | -0.2 | 1.0 |

## RETAIL TRADE IN METRO AREAS AND STATE
($000)

| | 5 Mos. '89 | 5 Mos. '88 | May '89 | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | | | | | 5 Mos. '89/'88 | May/April '89 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| **OKLAHOMA CITY MSA** | | | | | | | |
| Food Group | 1,003,827 | 943,842 | 203,455 | 214,755 | 6.4 | -0.3 | 3.5 |
| Apparel | 70,921 | 73,945 | 15,143 | 13,730 | -4.1 | 15.6 | 6.2 |
| General Merchandise Group | 326,647 | 312,387 | 65,942 | 62,646 | 4.6 | -4.5 | -2.6 |
| Furniture & Appliances | 114,716 | 94,659 | 21,680 | 21,060 | 21.2 | 7.3 | 4.9 |
| Lumber & Building Materials | 67,476 | 73,796 | 12,308 | 14,715 | -8.6 | -4.0 | 1.7 |
| Auto Dealers | 660,116 | 707,950 | 121,348 | 127,409 | -6.8 | 0.8 | 9.7 |
| Service Stations | 92,321 | 84,664 | 18,862 | 19,284 | 9.0 | -2.1 | -2.0 |
| All Other | 301,086 | 316,180 | 59,453 | 63,645 | -4.8 | 12.7 | 4.1 |
| Total | 2,637,110 | 2,607,423 | 518,191 | 537,244 | 1.1 | 1.3 | 4.0 |
| **TULSA MSA** | | | | | | | |
| Food Group | 577,106 | 549,788 | 119,290 | 124,608 | 5.0 | 2.6 | 6.0 |
| Apparel | 61,046 | 69,787 | 12,851 | 11,633 | -12.5 | 9.1 | 5.2 |
| General Merchandise Group | 279,586 | 276,432 | 55,841 | 55,489 | 1.1 | -1.2 | 0.2 |
| Furniture & Appliances | 62,086 | 65,031 | 12,340 | 11,887 | -4.5 | 4.7 | 1.4 |
| Lumber & Building Materials | 59,800 | 55,160 | 11,340 | 12,506 | 8.4 | -6.8 | -5.2 |
| Auto Dealers | 384,085 | 411,915 | 70,605 | 74,132 | -6.8 | 0.8 | 9.7 |
| Service Stations | 75,849 | 69,558 | 15,497 | 15,844 | 9.0 | -2.1 | -2.0 |
| All Other | 52,979 | 55,900 | 12,529 | 13,320 | -5.2 | -2.0 | 3.1 |
| Total | 1,552,537 | 1,553,571 | 310,293 | 319,419 | -0.1 | 1.0 | 4.5 |
| **ENID MSA** | | | | | | | |
| Food Group | 47,635 | 45,142 | 9,322 | 9,579 | 5.5 | -4.6 | -1.8 |
| Apparel | 6,658 | 6,777 | 1,416 | 1,435 | -1.8 | 11.8 | 7.1 |
| General Merchandise Group | 20,946 | 21,311 | 4,106 | 4,187 | -1.7 | -3.6 | 2.5 |
| Furniture & Appliances | 5,096 | 5,084 | 878 | 946 | 0.2 | -16.8 | -11.8 |
| Lumber & Building Materials | 6,773 | 6,626 | 1,180 | 1,350 | 2.2 | -14.9 | -12.1 |
| Auto Dealers | 37,776 | 40,519 | 6,944 | 7,291 | -6.8 | 0.8 | 9.7 |
| Service Stations | 6,805 | 6,240 | 1,391 | 1,422 | 9.1 | -2.1 | -2.0 |
| All Other | 14,963 | 14,549 | 3,198 | 3,379 | 2.8 | 24.4 | 12.8 |
| Total | 146,652 | 146,248 | 28,435 | 29,589 | 0.3 | -0.7 | 2.4 |
| **LAWTON MSA** | | | | | | | |
| Food Group | 76,665 | 77,965 | 15,132 | 16,206 | -1.7 | -0.2 | 5.7 |
| Apparel | 8,830 | 9,067 | 1,695 | 1,610 | -2.6 | 19.4 | 3.7 |
| General Merchandise Group | 60,075 | 63,060 | 11,897 | 12,015 | -4.7 | -2.8 | 0.4 |
| Furniture & Appliances | 11,347 | 11,908 | 2,378 | 2,336 | -4.7 | 11.4 | 16.5 |
| Lumber & Building Materials | 6,878 | 7,435 | 1,398 | 1,610 | -7.5 | 0.3 | 3.7 |
| Auto Dealers | 50,349 | 53,997 | 9,256 | 9,718 | -6.8 | 0.8 | 9.7 |
| Service Stations | 4,645 | 4,261 | 949 | 970 | 9.0 | -2.1 | -2.0 |
| All Other | 16,644 | 16,426 | 3,466 | 3,866 | 1.3 | 0.9 | 8.6 |
| Total | 235,433 | 244,119 | 46,171 | 48,331 | -3.6 | 0.5 | 5.5 |
| **MUSKOGEE AREA** | | | | | | | |
| Food Group | 57,308 | 53,193 | 11,589 | 12,095 | 7.7 | -0.7 | 0.3 |
| Apparel | 9,617 | 8,535 | 1,969 | 1,931 | 12.7 | 6.3 | 2.4 |
| General Merchandise Group | 19,416 | 20,045 | 4,106 | 4,021 | -3.1 | 1.3 | -2.4 |
| Furniture & Appliances | 5,897 | 4,987 | 1,157 | 1,136 | 18.2 | 3.5 | -4.3 |
| Lumber & Building Materials | 1,951 | 1,863 | 385 | 426 | 4.7 | -14.1 | -13.6 |
| Auto Dealers | 31,731 | 34,039 | 5,862 | 6,128 | -6.8 | 0.7 | 9.7 |
| Service Stations | 5,958 | 5,459 | 1,218 | 1,245 | 9.1 | -2.0 | -2.0 |
| All Other | 14,121 | 14,968 | 3,133 | 3,300 | -5.7 | 8.0 | 4.7 |
| Total | 145,999 | 143,089 | 29,419 | 30,282 | 2.0 | 1.1 | 1.8 |
| **STATE**[a] | | | | | | | |
| **Durable Goods** | 2,388,333 | 2,522,046 | 453,245 | 477,742 | -5.3 | 2.9 | 9.1 |
| Auto Dealers | 1,649,261 | 1,768,757 | 303,178 | 318,330 | -6.8 | 0.8 | 9.7 |
| Accessory Dealers | 142,668 | 137,677 | 29,283 | 32,407 | 3.6 | 6.3 | 12.4 |
| Total Automotive | 1,791,929 | 1,906,434 | 332,461 | 350,737 | -6.0 | 1.3 | 10.0 |
| Furniture & Appliances | 149,967 | 141,745 | 28,762 | 28,742 | 5.8 | -2.6 | 2.7 |
| Household Appliances | 89,960 | 100,095 | 17,796 | 17,502 | -10.1 | 3.7 | 7.8 |
| Total Furniture and Appliances | 239,927 | 241,840 | 46,558 | 46,244 | -0.8 | -0.3 | 4.5 |
| Lumber and Building Materials | 224,161 | 227,974 | 43,625 | 50,653 | -1.7 | 2.6 | 6.9 |
| Hardware Stores | 28,608 | 27,890 | 5,843 | 6,800 | 2.6 | -1.5 | -1.8 |
| Total Lumber, Building Materials & Hardware | 252,769 | 255,864 | 49,468 | 57,453 | -1.2 | 2.1 | 5.8 |
| **Nondurable Goods** | 4,571,975 | 4,417,561 | 890,860 | 931,851 | 3.5 | -4.0 | -0.5 |
| Apparel | 242,456 | 255,940 | 48,762 | 46,267 | -5.3 | 3.7 | 1.0 |
| Drug Stores | 217,427 | 205,629 | 43,537 | 44,081 | 5.7 | 5.4 | 7.4 |
| Eating and Drinking Places | 812,615 | 780,027 | 162,019 | 179,536 | 4.2 | -0.7 | 3.8 |
| Food Group | 1,850,364 | 1,783,488 | 373,053 | 396,566 | 3.7 | -1.0 | 5.5 |
| Service Stations | 303,167 | 277,996 | 61,943 | 63,327 | 9.1 | -2.1 | -2.0 |
| General Merchandise Group | 867,343 | 806,974 | 168,532 | [illegible] | 7.3 | -3.7 | 0.9 |
| **Total Retail Trade** | 6,960,308 | 6,939,607 | 1,344,105 | 1,409,593 | 0.3 | -1.8 | 2.5 |

[a] Total includes data for categories not shown in the table.

## ENID AND LAWTON MSAs
## MUSKOGEE MA

| Category | 5 Mos. '89 | 5 Mos. '88 | May '89 | Percentage Change | |
|---|---|---|---|---|---|
| | | | | 5 Mos. '89/'88 | May/Apr. '89 |
| **ENID MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 27,830 | 29,005 | 27,650 | -4.1 | 0.6 |
| Total Employment | 26,335 | 27,190 | 26,350 | -3.1 | 0.5 |
| Unemployment Rate (%) | 5.3 | 6.2 | 4.5 | — | — |
| Wage and Salary Employment | 21,220 | 21,580 | 21,000 | -1.7 | 0.9 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 398 | 355 | 225 | 12.1 | 257.1 |
| Number of Units | 4 | 4 | 2 | 0.0 | 100.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 300 | 0 | 0 | — | — |
| Number of Units | 6 | 0 | 0 | — | — |
| Nonresidential | | | | | |
| Commercial ($000) | 914 | 303 | 14 | 201.2 | -96.0 |
| Industrial ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Institutional ($000) | 0 | 300 | 0 | — | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 4,201 | 1,697 | 0 | 147.5 | — |
| All Other Nonbuilding ($000) | 75 | 121 | 18 | -37.7 | -64.9 |
| Total Construction ($000) | 5,887 | 2,776 | 257 | 112.1 | -94.4 |
| **LAWTON MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 47,875 | 49,085 | 48,675 | -2.5 | 1.2 |
| Total Employment | 45,345 | 46,215 | 46,225 | -1.8 | 1.1 |
| Unemployment Rate (%) | 5.3 | 5.8 | 5.0 | — | — |
| Wage & Salary Employment | 33,800 | 34,000 | 34,200 | -0.6 | 0.6 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 3,005 | 7,139 | 281 | -57.9 | -78.7 |
| Number of Units | 29 | 92 | 4 | -68.5 | -55.6 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 180 | 0 | — | 0.0 |
| Number of Units | 0 | 6 | 0 | — | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 1,201 | 916 | 87 | 31.1 | -88.1 |
| Industrial ($000) | 0 | 40 | 0 | — | 0.0 |
| Institutional ($000) | 0 | 1,300 | 0 | — | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 567 | 1,848 | 180 | -69.3 | -51.3 |
| All Other Nonbuilding ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Total Construction ($000) | 4,773 | 11,422 | 548 | -58.2 | -77.4 |
| **MUSKOGEE MA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 31,755 | 31,795 | 31,325 | -0.1 | 0.1 |
| Total Employment | 29,195 | 28,650 | 29,025 | 1.9 | 0.4 |
| Unemployment Rate (%) | 8.1 | 9.9 | 7.7 | — | — |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 0 | 216 | 0 | — | 0.0 |
| Number of Units | 0 | 2 | 0 | — | 0.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Number of Units | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 0 | 400 | 0 | — | 0.0 |
| Industrial ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 803 | 582 | 633 | 38.1 | 272.5 |
| All Other Nonbuilding ($000) | 0 | 5 | 0 | — | 0.0 |
| Total Construction ($000) | 803 | 1,202 | 633 | -33.2 | 272.5 |

Note: Includes revisions.

[a] Civilian Labor Force.

Sources for all tables: Local utilities companies; 10th Federal Reserve Bank; Federal Home Loan Bank of Topeka; Oklahoma Employment Security Commission; United States Department of Commerce, Construction Statistics Division; Oklahoma Department of Transportation, Center for Economic and Management Research, College of Business Administration, The University of Oklahoma. The data for all tables were compiled by Marjorie E. Earley, Statistician for CEMR and Brian M. Hickey, Research Assistant.

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Center for Economic and Management Research
University of Oklahoma
Norman, Oklahoma 73019-0450

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## OKLAHOMA CITY AND TULSA MSAs

| | | | | Percentage Change | |
|---|---|---|---|---|---|
| Category | 5 Mos. '89 | 5 Mos. '88 | May '89 | 5 Mos. '89/'88 | May/Apr. '89 |
| **OKLAHOMA CITY MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 487,560 | 496,880 | 489,000 | -1.9 | 0.6 |
| Total Employment | 462,200 | 467,680 | 464,600 | -1.2 | 0.6 |
| Unemployment Rate (%) | 5.2 | 5.9 | 5.0 | — | — |
| Wage and Salary Employment | 406,800 | 406,000 | 408,200 | 0.2 | 0.4 |
| Mortgage Loans Closed ($000,000)[b] | 42 | 37 | 7 | 15.2 | -11.2 |
| **Bank Deposits ($000,000)[c]** | | | | | |
| Demand Deposits | 821 | 798 | 809 | 2.9 | 5.5 |
| Time and Savings Deposits | 1,170 | 1,101 | 1,153 | 6.3 | -0.1 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 45,161 | 46,063 | 10,017 | -2.0 | -11.9 |
| Number of Units | 602 | 657 | 132 | -8.4 | -14.8 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 20,120 | 125 | 14,052 | E | E |
| Number of Units | 417 | 8 | 234 | E | E |
| Nonresidential | | | | | |
| Commercial ($000) | 15,712 | 24,210 | 1,494 | -35.1 | -59.0 |
| Industrial ($000) | 2,454 | 3,799 | 82 | -35.4 | -96.4 |
| Institutional ($000) | 5,191 | 8,093 | 2,475 | -35.9 | 568.9 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 10,218 | 35,918 | 3,106 | -71.6 | 27.0 |
| All Other Nonbuilding ($000) | 1,031 | 957 | 268 | 7.7 | -3.8 |
| Total Construction ($000) | 99,888 | 119,166 | 31,494 | -16.2 | 50.1 |
| **TULSA MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 337,400 | 339,420 | 339,100 | -0.6 | 1.0 |
| Total Employment | 314,740 | 312,620 | 317,500 | 0.7 | 0.5 |
| Unemployment Rate (%) | 6.7 | 7.9 | 6.4 | — | — |
| Wage and Salary Employment | 298,100 | 293,600 | 300,600 | 1.5 | 0.4 |
| Mortgage Loans Closed ($000,000)[b] | 66 | 87 | 12 | -23.7 | -12.3 |
| **Bank Deposits ($000,000)[c]** | | | | | |
| Demand Deposits | 938 | 890 | 935 | 5.4 | -2.5 |
| Time and Savings Deposits | 2,089 | 2,165 | 2,078 | -3.5 | -1.3 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 61,993 | 45,333 | 14,972 | 36.7 | 13.0 |
| Number of Units | 777 | 592 | 190 | 31.3 | 15.9 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 82 | 1,298 | 0 | -93.7 | — |
| Number of Units | 4 | 56 | 0 | -92.9 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 13,929 | 10,335 | 3,230 | 34.8 | 209.3 |
| Industrial ($000) | 10,915 | 9,559 | 1,540 | 14.2 | -39.1 |
| Institutional ($000) | 10,156 | 1,589 | 2,046 | 539.2 | -71.5 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 15,571 | 14,954 | 4,368 | 4.1 | 8.2 |
| All Other Nonbuilding ($000) | 1,348 | 1,707 | 380 | -21.0 | 5.3 |
| Total Construction ($000) | 113,993 | 84,775 | 26,535 | 34.5 | -6.6 |

Note: Includes revisions.

E = Exceeds 600 percent.

[a] Civilian Labor Force.

[b] By Savings and Loan Associations.

[c] Total deposits of large commercial banks (accounted for 35 percent of all commercial bank deposits as of December 31, 1988 for Oklahoma City and 54 percent of all commercial bank deposits as of December 31, 1988 for Tulsa).

## CONSTRUCTION, STATE

| | | | | Percentage Change | |
|---|---|---|---|---|---|
| Category | 5 Mos. '89 | 5 Mos. '88 | May '89 | 5 Mos. '89/'88 | May/Apr. '89 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 119,695 | 108,488 | 26,389 | 10.3 | -3.8 |
| Number of Units | 1,540 | 1,473 | 342 | 4.5 | -2.6 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 20,502 | 2,474 | 14,052 | E | E |
| Number of Units | 427 | 146 | 234 | 192.5 | E |
| Nonresidential | | | | | |
| Commercial ($000) | 41,460 | 41,458 | 5,622 | 0.0 | -24.7 |
| Industrial ($000) | 13,768 | 17,601 | 1,697 | -21.8 | -64.7 |
| Institutional ($000) | 17,964 | 14,595 | 5,908 | 23.1 | -24.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 110,729 | 124,713 | 31,456 | -11.2 | -0.6 |
| All Other Nonbuilding ($000) | 2,621 | 2,899 | 719 | -9.6 | -6.4 |
| Total Construction ($000) | 326,739 | 312,229 | 85,843 | 4.6 | 6.2 |

Note: Includes revisions. E = Exceeds 600 percent.

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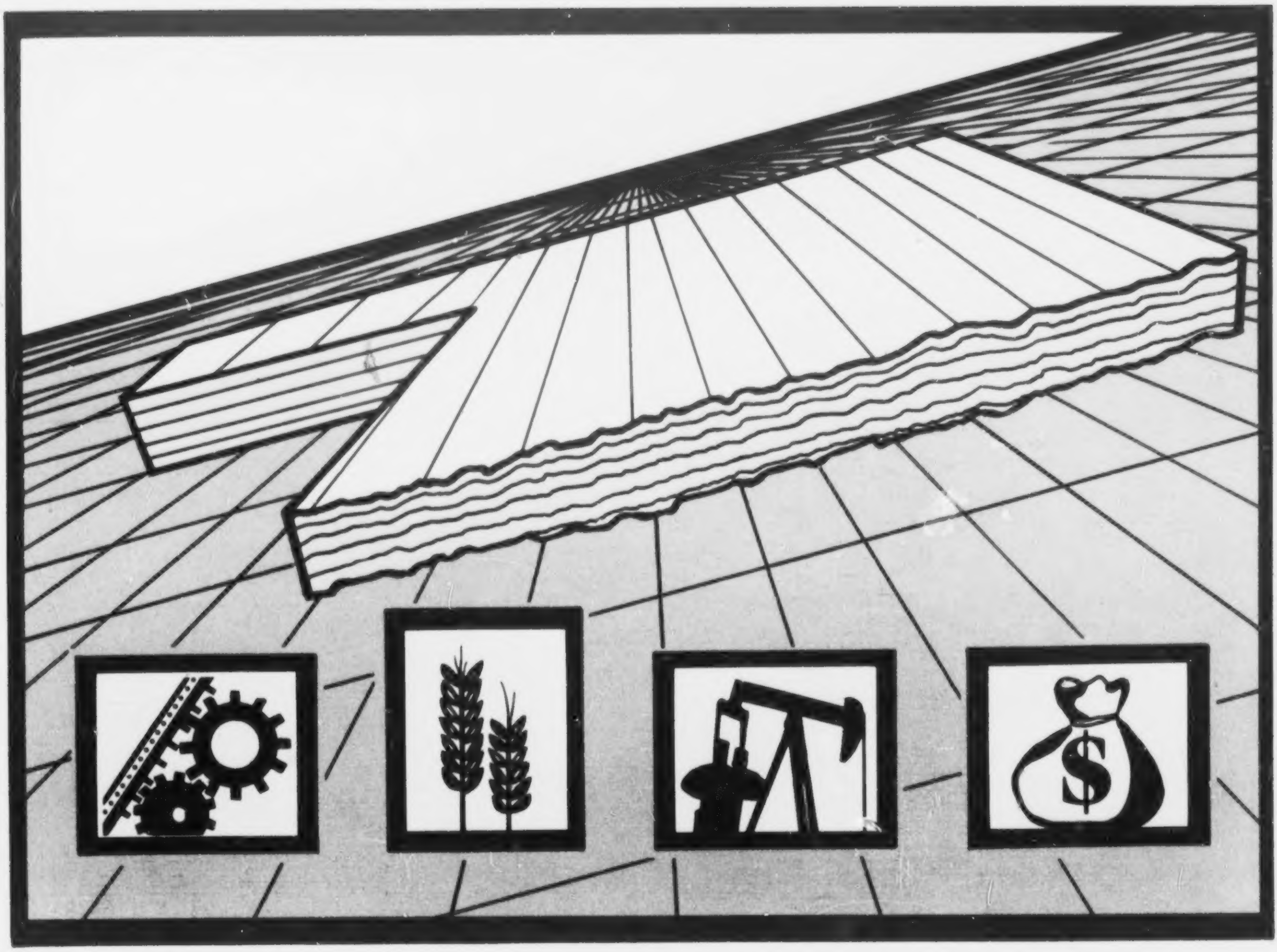
# OKLAHOMA BUSINESS BULLETIN

CENTER FOR ECONOMIC AND MANAGEMENT RESEARCH
COLLEGE OF BUSINESS ADMINISTRATION
THE UNIVERSITY OF OKLAHOMA

[illegible]

September 1989

VOL. 57, ISSUE 9



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## SUMMARY OF INDICATORS

| Category | 6 Mos. '89 | 6 Mos. '88 | June '89 | Percentage Change<br>6 Mos. '89/'88 | Percentage Change<br>June/May '89 |
|---|---|---|---|---|---|
| **Personal Income (Monthly Average)** | | | | | |
| Unadjusted ($000,000) | 3,786 | 3,562 | 3,828 | 6.3 | 0.3 |
| Adjusted for CPI ($000,000) | 3,086 | 3,050 | 3,085 | 1.2 | 0.0 |
| **Crude Oil Production (000 bbl)**[a] | 45,828 | 50,714 | 9,205 | -9.6 | -0.3 |
| **Natural Gas Production (000 mcf)**[a] | 847,023 | 889,881 | 145,316 | -4.8 | -16.4 |
| **Industrial Power Sales (000,000 Kwh)**[b] | 4,296 | 4,130 | 756 | 4.0 | 4.0 |
| **Total Bank Deposits (Monthly Average) ($000,000)**[c] | | | | | |
| Demand | 7,458 | 7,588 | 7,264 | -1.7 | -1.5 |
| Savings | 23,568 | 24,557 | 23,398 | -4.0 | -0.1 |
| **Savings and Loan Associations ($000,000)** | | | | | |
| Assets | 10,762 | 8,555 | 10,696 | 25.8 | 0.2 |
| Mortgage Loans Closed | 251 | 277 | 43 | -9.4 | 20.7 |
| **General Business Index** | 95.5 | 94.5 | 96.1 | 1.1 | 0.5 |

Note: Includes revisions.

[a] Five months and May data. Natural gas includes casinghead gas.

[b] Sales of larger privately owned utility companies.

[c] Total deposits of all depository institutions.

## SELECTED ECONOMIC INDICATORS

| Category | 6 Mos. '89 | 6 Mos. '88 | June '89 | Percentage Change<br>6 Mos. '89/'88 | Percentage Change<br>June/May '89 |
|---|---|---|---|---|---|
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 145,540 | 137,083 | 25,844 | 6.2 | -2.1 |
| Number of Units | 1,867 | 1,848 | 327 | 1.0 | -4.4 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 21,498 | 3,753 | 996 | 472.8 | -92.9 |
| Number of Units | 492 | 214 | 65 | 129.9 | -72.2 |
| Nonresidential | | | | | |
| Commercial ($000) | 45,225 | 73,236 | 3,765 | -38.2 | -33.0 |
| Industrial ($000) | 14,207 | 20,272 | 439 | -29.9 | -74.1 |
| Institutional ($000) | 20,540 | 22,919 | 2,576 | -10.4 | -56.4 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 155,164 | 149,982 | 44,435 | 3.5 | 41.3 |
| All Other Nonbuilding ($000) | 3,128 | 3,806 | 508 | -17.8 | -29.4 |
| Total Construction ($000) | 405,302 | 411,050 | 78,563 | -1.4 | -8.5 |
| **EMPLOYMENT TRENDS** | | | | | |
| **Total Labor Force (000)**[a] | 1,517.0 | 1,529.5 | 1,546.6 | -0.8 | 2.2 |
| **Total Employment (000)** | 1,422.3 | 1,421.0 | 1,459.2 | 0.1 | 2.6 |
| **Unemployment Rate (%)** | 6.3 | 7.1 | 5.7 | — | — |
| **Wage and Salary Employment** | 1,137.3 | 1,125.6 | 1,144.1 | 1.0 | -0.2 |
| **Manufacturing (000)** | 163.6 | 161.0 | 164.9 | 1.6 | 0.7 |
| **Mining (000)** | 43.8 | 45.2 | 43.3 | -3.1 | -1.1 |
| **Government (000)** | 252.4 | 250.0 | 248.4 | 1.0 | -2.5 |
| **Contract Construction (000)** | 33.0 | 33.9 | 34.6 | -2.8 | 0.9 |
| **Services (000)** | 249.2 | 243.6 | 252.8 | 2.3 | 1.2 |
| **Retail Trade (000)**[b] | 217.0 | 211.4 | 219.8 | 2.6 | -0.6 |
| **Average Weekly Hours (Per Worker)** | | | | | |
| **Manufacturing** | 41.2 | 41.1 | 41.8 | 0.2 | 0.7 |
| **Average Weekly Earnings ($ Per Worker)** | | | | | |
| **Manufacturing** | 437.03 | 421.12 | 441.41 | 3.8 | 1.1 |
| Contract Construction | 415.67 | 424.40 | 401.14 | -2.1 | -3.2 |
| Retail Trade[b] | 190.34 | 188.89 | 193.71 | 0.8 | 2.9 |

Note: Includes revisions in some previous months.

[a] Civilian Labor Force.

[b] Excluding eating and drinking places.

## RETAIL TRADE IN METRO AREAS AND STATE
($000)

| | | | | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | 6 Mos. '89 | 6 Mos. '88 | June '89 | | 6 Mos. '89/'88 | June/May '89 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| **OKLAHOMA CITY MSA** | | | | | | | |
| Food Group | 1,216,690 | 1,134,640 | 211,899 | 220,167 | 7.2 | 3.7 | 2.5 |
| Apparel Group | 86,387 | 87,373 | 15,438 | 14,016 | -1.1 | 1.3 | 2.1 |
| General Merchandise Group | 393,136 | 374,854 | 67,042 | 66,862 | 4.9 | 1.8 | 6.7 |
| Furniture Group | 137,122 | 115,560 | 22,597 | 22,231 | 18.7 | 3.4 | 5.6 |
| Lumber Group | 80,033 | 89,443 | 12,504 | 15,171 | -10.5 | 0.5 | 3.1 |
| Auto Dealers | 787,134 | 888,684 | 124,307 | 142,279 | -11.4 | 1.8 | 11.7 |
| Gasoline | 111,145 | 101,739 | 18,882 | 20,077 | 9.2 | 0.0 | 4.1 |
| All Other | 361,608 | 382,171 | 60,238 | 61,555 | -5.4 | 2.0 | -3.3 |
| Total | 3,173,255 | 3,174,464 | 532,907 | 562,358 | 0.0 | 2.5 | 4.7 |
| **TULSA MSA** | | | | | | | |
| Food Group | 697,467 | 662,773 | 120,324 | 125,268 | 5.2 | 0.7 | 0.5 |
| Apparel Group | 74,539 | 81,873 | 13,371 | 12,279 | -9.0 | 2.6 | 5.6 |
| General Merchandise Group | 340,561 | 330,755 | 60,720 | 61,054 | 3.0 | 8.0 | 10.0 |
| Furniture Group | 75,319 | 77,830 | 13,110 | 13,368 | -3.2 | 5.7 | 12.5 |
| Lumber Group | 71,929 | 66,812 | 11,886 | 13,812 | 7.7 | 4.2 | 10.4 |
| Auto Dealers | 457,989 | 517,073 | 72,327 | 82,784 | -11.4 | 1.8 | 11.7 |
| Gasoline | 91,314 | 83,586 | 15,513 | 16,495 | 9.2 | 0.0 | 4.1 |
| All Other | 64,514 | 69,924 | 11,390 | 12,358 | -7.7 | -6.7 | -7.2 |
| Total | 1,873,632 | 1,890,626 | 318,641 | 337,418 | -0.9 | 2.3 | 5.6 |
| **ENID MSA** | | | | | | | |
| Food Group | 58,398 | 54,740 | 10,457 | 10,966 | 6.7 | 8.1 | 14.5 |
| Apparel Group | 8,059 | 8,118 | 1,394 | 1,300 | -0.7 | -1.9 | -9.4 |
| General Merchandise Group | 25,380 | 25,482 | 4,417 | 4,270 | -0.4 | 7.1 | 2.0 |
| Furniture Group | 6,058 | 6,402 | 952 | 913 | -5.4 | 6.1 | -3.5 |
| Lumber Group | 8,139 | 7,917 | 1,367 | 1,556 | 2.8 | 14.2 | 15.3 |
| Auto Dealers | 45,054 | 50,874 | 7,113 | 8,142 | -11.4 | 1.9 | 11.7 |
| Gasoline | 8,193 | 7,498 | 1,392 | 1,480 | 9.3 | 0.0 | 4.1 |
| All Other | 17,832 | 17,452 | 3,049 | 3,007 | 2.2 | 5.5 | -11.0 |
| Total | 177,113 | 178,483 | 30,141 | 31,634 | -0.8 | 5.5 | 6.9 |
| **LAWTON MSA** | | | | | | | |
| Food Group | 87,990 | 93,464 | 11,516 | 11,678 | -5.9 | -23.2 | -27.9 |
| Apparel Group | 10,703 | 10,832 | 1,861 | 1,852 | -1.2 | 9.1 | 15.0 |
| General Merchandise Group | 72,917 | 75,262 | 12,736 | 12,381 | -3.1 | 6.6 | 3.0 |
| Furniture Group | 13,812 | 14,143 | 2,509 | 2,343 | -2.3 | 4.3 | 0.3 |
| Lumber Group | 8,360 | 8,974 | 1,470 | 1,636 | -6.8 | 4.6 | 1.6 |
| Auto Dealers | 60,037 | 67,781 | 9,481 | 10,852 | -11.4 | 1.8 | 11.7 |
| Gasoline | 5,593 | 5,120 | 950 | 1,010 | 9.2 | 0.0 | 4.1 |
| All Other | 19,434 | 19,303 | 3,456 | 3,767 | 0.7 | 7.9 | -2.6 |
| Total | 278,846 | 294,879 | 43,979 | 45,519 | -5.4 | -4.2 | -5.8 |
| **MUSKOGEE AREA** | | | | | | | |
| Food Group | 68,889 | 63,660 | 11,639 | 12,067 | 8.2 | 0.2 | -0.2 |
| Apparel Group | 11,685 | 10,349 | 2,061 | 1,905 | 12.9 | 3.9 | -1.3 |
| General Merchandise Group | 23,669 | 23,975 | 4,294 | 4,039 | -1.3 | 3.8 | 0.4 |
| Furniture Group | 7,147 | 5,977 | 1,252 | 1,263 | 19.6 | 8.0 | 11.2 |
| Lumber Group | 2,314 | 2,225 | 362 | 443 | 4.0 | -5.0 | 4.0 |
| Auto Dealers | 37,819 | 42,718 | 5,985 | 6,843 | -11.5 | 1.8 | 11.7 |
| Gasoline | 7,174 | 6,559 | 1,218 | 1,296 | 9.4 | 0.0 | 4.1 |
| All Other | 16,469 | 17,813 | 2,475 | 2,809 | -7.5 | -17.9 | -14.9 |
| Total | 175,166 | 173,276 | 29,286 | 30,665 | 1.1 | -0.3 | 1.3 |
| **STATE**[a] | | | | | | | |
| **Durable Goods** | 2,853,581 | 3,132,746 | 459,735 | 515,919 | -8.9 | 0.9 | 8.0 |
| Auto Dealers | 1,966,627 | 2,220,333 | 310,587 | 355,482 | -11.4 | 1.8 | 11.7 |
| Accessory Dealers | 171,546 | 165,328 | 28,804 | 32,404 | 3.8 | -1.7 | 0.0 |
| Total Automotive | 2,138,173 | 2,385,661 | 339,391 | 387,886 | -10.4 | 1.5 | 10.6 |
| Furniture | 181,056 | 169,856 | 30,724 | 31,202 | 6.6 | 6.2 | 8.6 |
| Household Appliances | 107,274 | 118,844 | 17,468 | 17,742 | -9.7 | -1.8 | 1.4 |
| Total Furniture and Appliances | 288,330 | 288,700 | 48,192 | 48,944 | -0.1 | 3.2 | 5.8 |
| Lumber and Building Materials | 268,616 | 278,879 | 42,578 | 49,782 | -3.7 | -2.7 | -1.7 |
| Hardware Stores | 34,140 | 33,521 | 5,590 | 6,346 | 1.8 | -4.3 | -6.7 |
| Total Lumber, Building Materiais & Hardware | 302,756 | 312,400 | 48,168 | 56,128 | -3.1 | -2.9 | -2.3 |
| **Nondurable Goods** | 5,513,046 | 5,299,428 | 938,919 | 968,184 | 4.0 | 5.8 | 3.9 |
| Apparel | 294,016 | 303,054 | 51,295 | 47,317 | -3.0 | 4.6 | 2.3 |
| Drug Stores | 259,464 | 248,331 | 42,148 | 40,881 | 4.5 | -3.1 | -7.3 |
| Eating and Drinking Places | 983,862 | 931,594 | 169,389 | 181,116 | 5.6 | 4.0 | 0.9 |
| Food Group | 2,226,407 | 2,141,132 | 377,037 | 390,935 | 4.0 | 1.1 | -1.4 |
| Gasoline | 364,980 | 334,063 | 62,006 | 65,930 | 9.3 | 0.0 | 4.1 |
| General Merchandise Group | 1,046,797 | 979,003 | 177,923 | 177,592 | 6.9 | 5.0 | 3.1 |
| **Total Retail Trade** | 8,366,627 | 8,432,174 | 1,398,654 | 1,484,103 | -0.8 | 4.2 | 5.3 |

[a] Total includes data for categories not shown in the table.

## RETAIL TRADE IN SELECTED CITIES
($000)

| | 6 Mos. '89 | 6 Mos. '88 | June '89 | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | | | | | 6 Mos. '89/'88 | June/May '89 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| Ada | 81,275 | 80,792 | 14,009 | 14,462 | 0.6 | 4.0 | 2.7 |
| Altus | 69,605 | 72,623 | 11,726 | 12,334 | -4.2 | -0.5 | 0.2 |
| Alva | 21,413 | 22,424 | 3,497 | 3,771 | -4.5 | 1.1 | 4.3 |
| Anadarko | 27,613 | 28,705 | 4,349 | 4,690 | -3.8 | -3.3 | -1.6 |
| Ardmore | 110,379 | 114,097 | 18,525 | 19,406 | -3.3 | 1.1 | 1.8 |
| Bartlesville | 115,823 | 113,867 | 19,016 | 19,809 | 1.7 | -1.9 | 0.4 |
| Blackwell | 19,003 | 20,188 | 3,151 | 3,345 | -5.9 | 4.0 | 4.8 |
| Broken Arrow | 112,672 | 112,299 | 19,203 | 20,654 | 0.3 | 3.0 | 3.8 |
| Chickasha | 52,793 | 54,494 | 9,020 | 9,467 | -3.1 | 2.3 | 2.5 |
| Clinton | 37,107 | 38,342 | 6,018 | 6,543 | -3.2 | 0.3 | 5.3 |
| Cushing | 30,083 | 32,159 | 4,515 | 5,059 | -6.5 | -11.1 | -7.8 |
| Del City | 61,337 | 63,234 | 9,781 | 10,929 | -3.0 | 0.0 | 0.2 |
| Duncan | 81,605 | 88,893 | 13,568 | 14,313 | -8.2 | 3.6 | 0.7 |
| Durant | 59,716 | 62,475 | 10,252 | 10,895 | -4.4 | 3.7 | 7.3 |
| Edmond | 149,313 | 144,267 | 24,979 | 25,440 | 3.5 | 0.6 | -0.2 |
| Elk City | 43,765 | 44,520 | 7,325 | 7,697 | -1.7 | 0.2 | 1.4 |
| El Reno | 46,818 | 45,215 | 7,700 | 8,086 | 3.5 | -0.5 | 0.6 |
| Guthrie | 30,906 | 30,788 | 4,824 | 5,172 | 0.4 | -19.7 | -20.2 |
| Guymon | 26,374 | 26,051 | 4,371 | 4,493 | 1.2 | -0.5 | -4.3 |
| Henryetta | 27,243 | 28,492 | 4,511 | 4,784 | -4.4 | -0.8 | -2.6 |
| Hobart | 13,068 | 13,507 | 2,132 | 2,323 | -3.2 | -0.2 | 2.4 |
| Holdenville | 15,049 | 15,969 | 2,526 | 2,642 | -5.8 | 1.3 | 1.7 |
| Hugo | 16,158 | 16,721 | 2,721 | 2,845 | -3.4 | 1.9 | 1.8 |
| Idabel | 21,619 | 21,685 | 3,632 | 3,809 | -0.3 | 2.4 | 3.7 |
| Lawton | 266,523 | 282,472 | 42,313 | 43,324 | -5.6 | -3.3 | -5.6 |
| McAlester | 57,259 | 60,148 | 9,512 | 9,915 | -4.8 | 1.5 | -0.1 |
| Miami | 64,396 | 67,083 | 11,020 | 11,438 | -4.0 | 2.2 | 3.4 |
| Midwest City | 200,339 | 209,259 | 34,114 | 34,905 | -4.3 | 4.9 | 2.3 |
| Moore | 71,789 | 80,451 | 11,801 | 12,147 | -10.8 | -5.3 | -5.0 |
| Muskogee | 167,941 | 167,911 | 28,181 | 29,334 | 0.0 | 0.8 | 1.9 |
| Norman | 357,537 | 362,506 | 62,282 | 66,370 | -1.4 | 8.0 | 14.2 |
| Oklahoma City | 1,589,585 | 1,597,432 | 264,602 | 279,993 | -0.5 | 2.8 | 6.1 |
| Okmulgee | 29,364 | 30,901 | 4,830 | 5,165 | -5.0 | 1.0 | 2.2 |
| Pauls Valley | 24,022 | 24,689 | 4,078 | 4,271 | -2.7 | 0.8 | 4.0 |
| Pawhuska | 9,669 | 9,735 | 1,679 | 1,731 | -0.7 | 4.3 | 0.2 |
| Ponca City | 99,971 | 97,590 | 16,693 | 17,787 | 2.4 | 0.0 | 1.5 |
| Poteau | 26,630 | 27,314 | 4,399 | 4,660 | -2.5 | 3.5 | 5.4 |
| Sand Springs | 50,380 | 49,518 | 8,565 | 8,853 | 1.7 | 0.2 | -2.3 |
| Sapulpa | 73,871 | 74,246 | 12,435 | 12,977 | -0.5 | -1.0 | -2.1 |
| Seminole | 32,264 | 34,504 | 5,504 | 5,778 | -6.5 | 0.4 | 0.2 |
| Shawnee | 159,249 | 155,892 | 26,559 | 26,664 | 2.2 | -0.6 | -8.3 |
| Stillwater | 143,498 | 145,401 | 23,649 | 23,240 | -1.3 | 0.7 | -1.3 |
| Tahlequah | 43,752 | 44,553 | 7,285 | 7,574 | -1.8 | 1.8 | -1.9 |
| Tulsa | 1,422,343 | 1,437,813 | 244,685 | 257,298 | -1.1 | 3.7 | 7.4 |
| Watonga | 10,175 | 9,960 | 1,660 | 1,771 | 2.2 | -1.1 | 1.4 |
| Weatherford | 31,910 | 31,887 | 5,662 | 5,949 | 0.1 | -0.2 | 0.9 |
| Wewoka | 6,218 | 6,546 | 1,034 | 1,118 | -5.0 | 1.9 | 2.9 |
| Woodward | 65,092 | 66,877 | 10,827 | 11,368 | -2.7 | -0.4 | -0.5 |
| **Total Selected Cities** | 6,274,513 | 6,366,499 | 1,054,718 | 1,106,598 | -1.4 | 2.1 | 3.7 |

◆

Sources for all tables: Local utilities companies; 10th Federal Reserve District Member Banks; Federal Home Loan Bank of Topeka; Oklahoma Employment Security Commission; United States Department of Commerce, Construction Statistics Division; Oklahoma Department of Transportation, *Progressive Report of the Transportation Director;* Center for Economic and Management Research, College of Business Administration, The University of Oklahoma. The data for all tables were compiled by Marjorie E. Earley, Statistician for CEMR and Brian Hickey, Research Assistant.

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## ENID AND LAWTON MSAs

| Category | 6 Mos. '89 | 6 Mos. '88 | June '89 | Percentage Change<br>6 Mos. '89/'88 | Percentage Change<br>June/May '89 |
|---|---|---|---|---|---|
| **ENID MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 27,962 | 28,967 | 28,625 | -3.5 | 3.5 |
| Total Employment | 26,492 | 27,175 | 27,275 | -2.5 | 3.5 |
| Unemployment Rate (%) | 5.2 | 6.2 | 4.7 | — | — |
| Wage and Salary Employment | 21,217 | 21,600 | 21,200 | -1.8 | 1.0 |
| Wholesale and Retail Trade | 6,000 | 6,300 | 6,100 | -4.8 | 0.0 |
| Services | 5,400 | 5,267 | 5,400 | 2.5 | 1.9 |
| Government | 3,517 | 3,500 | 3,400 | 0.5 | 0.0 |
| **Industrial Power Sales (000 Kwh)** | 224,131 | 232,936 | 38,052 | -3.8 | 1.2 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 538 | 355 | 140 | 51.5 | -37.8 |
| Number of Units | 5 | 4 | 1 | 25.0 | -50.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 300 | 0 | 0 | — | 0.0 |
| Number of Units | 6 | 0 | 0 | — | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 1,059 | 337 | 146 | 214.5 | E |
| Industrial ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Institutional ($000) | 0 | 300 | 0 | — | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 4,372 | 1,697 | 172 | 157.7 | — |
| All Other Nonbuilding ($000) | 131 | 121 | 56 | 8.5 | 210.8 |
| Total Construction ($000) | 6,401 | 2,810 | 513 | 127.8 | 99.9 |
| **LAWTON MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 48,238 | 49,050 | 50,050 | -1.7 | 0.8 |
| Total Employment | 45,742 | 46,154 | 47,725 | -0.9 | 3.2 |
| Unemployment Rate (%) | 5.2 | 5.9 | 4.6 | — | — |
| Wage and Salary Employment | 33,900 | 34,200 | 34,600 | -0.9 | 1.2 |
| **Industrial Power Sales (000 Kwh)** | 97,217 | 94,954 | 17,851 | 2.4 | 4.9 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 3,805 | 7,973 | 800 | -52.3 | 184.7 |
| Number of Units | 38 | 104 | 9 | -63.5 | 125.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 180 | 0 | — | 0.0 |
| Number of Units | 0 | 6 | 0 | — | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 1,772 | 2,733 | 571 | -35.2 | 555.9 |
| Industrial ($000) | 191 | 830 | 191 | -77.0 | — |
| Institutional ($000) | 0 | 1,300 | 0 | — | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 567 | 1,848 | 0 | -69.3 | — |
| All Other Nonbuilding ($000) | 38 | 0 | 38 | — | — |
| Total Construction ($000) | 6,372 | 14,864 | 1,599 | -57.1 | 191.6 |

Note: Includes revisions. [a]Civilian Labor Force. E = Exceeds 600 percent.

## MUSKOGEE MA

| Category | 6 Mos. '89 | 6 Mos. '88 | June '89 | Percentage Change<br>6 Mos. '89/'88 | Percentage Change<br>June/May. '89 |
|---|---|---|---|---|---|
| **Employment (Number)** | | | | | |
| Labor Force[a] | 31,733 | 31,871 | 31,625 | -0.4 | 1.0 |
| Total Employment | 29,229 | 28,717 | 29,400 | 1.8 | 1.3 |
| Unemployment Rate (%) | 7.9 | 9.9 | 7.0 | — | — |
| **Industrial Power Sales (000 Kwh)** | 84,300 | 88,409 | 14,909 | -4.6 | 9.3 |
| Port of Muskogee | | | | | |
| Tons in | 56,732 | 48,838 | 12,208 | 16.2 | 9.9 |
| Tons out | 25,785 | 17,065 | 1,440 | 51.1 | -49.9 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 0 | 216 | 0 | — | 0.0 |
| Number of Units | 0 | 2 | 0 | — | 0.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Number of Units | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 0 | 400 | 0 | — | 0.0 |
| Industrial ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Institutional ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 803 | 582 | 0 | 38.1 | — |
| All Other Nonbuilding ($000) | 0 | 5 | 0 | — | 0.0 |
| Total Construction ($000) | 803 | 1,202 | 0 | -33.2 | — |

Note: Includes revisions. [a]Civilian Labor Force.

## TULSA MSA

| | | | | Percentage Change | |
|---|---|---|---|---|---|
| Category | 6 Mos. '89 | 6 Mos. '88 | June '89 | 6 Mos. '89/'88 | June/May '89 |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 339,200 | 339,500 | 348,200 | -0.1 | 2.7 |
| Total Employment | 316,900 | 312,633 | 327,700 | 1.4 | 3.2 |
| Unemployment Rate (%) | 6.6 | 7.9 | 5.9 | — | — |
| Wage and Salary Employment | 298,933 | 294,350 | 302,900 | 1.6 | 0.8 |
| Manufacturing | 49,433 | 49,167 | 49,700 | 0.5 | 1.2 |
| Mining | 14,417 | 14,233 | 14,600 | 1.3 | 0.7 |
| Government | 36,983 | 37,117 | 37,300 | -0.4 | 1.1 |
| Wholesale and Retail Trade | 70,400 | 70,500 | 71,700 | -0.1 | 0.4 |
| **Average Weekly Earnings** | | | | | |
| Manufacturing ($ Per Worker) | 443.38 | 446.70 | 445.88 | -0.7 | -1.5 |
| **Industrial Power Sales (000 Kwh)** | 1,150,217 | 1,069,259 | 203,190 | 7.6 | 6.8 |
| **Mortgage Loans Closed ($000,000)** | NA | NA | NA | — | — |
| **Bank Deposits ($000,000)[b]** | | | | | |
| Demand Deposits | 935 | 906 | 921 | 3.2 | -1.5 |
| Time and Savings Deposits | 2,089 | 2,162 | 2,087 | -3.4 | 0.4 |
| **Air Transportation** | | | | | |
| Passengers Enplaning (Number) | 676,778 | 661,873 | 141,028 | 2.2 | 13.8 |
| Passengers Deplaning (Number) | 690,765 | 664,224 | 147,672 | 4.0 | 19.9 |
| Freight (Tons) | 13,004 | 10,444 | 2,314 | 24.5 | 2.5 |
| **Water Transportation** | | | | | |
| Tulsa Port of Catoosa | | | | | |
| Tons In | 328,605 | 286,682 | 48,910 | 14.6 | -24.4 |
| Tons Out | 552,843 | 596,920 | 100,266 | -7.4 | 171.9 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 74,272 | 56,314 | 12,279 | 31.9 | -18.0 |
| Number of Units | 932 | 734 | 155 | 27.0 | -18.4 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 82 | 1,298 | 0 | -93.7 | 0.0 |
| Number of Units | 4 | 56 | 0 | -92.9 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 15,663 | 32,229 | 1,734 | -51.4 | -46.3 |
| Industrial ($000) | 11,163 | 11,405 | 248 | -2.1 | -83.9 |
| Institutional ($000) | 10,541 | 8,448 | 384 | 24.8 | -81.2 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 31,671 | 20,437 | 16,100 | 55.0 | 268.6 |
| All Other Nonbuilding ($000) | 1,632 | 2,255 | 284 | -27.7 | -25.3 |
| Total Construction | 145,022 | 132,385 | 31,029 | 9.5 | 16.9 |
| **General Business Index** | 92.4 | 87.2 | 93.1 | 6.0 | -0.5 |

Note: Includes revisions.

[a] Civilian Labor Force.

[b] Deposits of large commercial banks (accounted for 50 percent of all commercial bank deposits as of December 31, 1988).

NA = Not Available.

## OKLAHOMA CITY MSA

| Category | 6 Mos. '89 | 6 Mos. '88 | June '89 | Percentage Change<br>6 Mos. '89/'88 | Percentage Change<br>June/May '89 |
|---|---|---|---|---|---|
| **Employment (Number)** | | | | | |
| Labor Force[a] | 489,200 | 496,833 | 497,400 | -1.5 | 1.7 |
| Total Employment | 464,200 | 467,650 | 474,200 | -0.7 | 2.1 |
| Unemployment Rate (%) | 5.1 | 5.9 | 4.7 | — | — |
| Wage and Salary Employment | 406,883 | 406,633 | 407,100 | 0.1 | -0.3 |
| Manufacturing | 49,283 | 48,217 | 49,300 | 2.2 | -0.4 |
| Mining | 10,283 | 12,000 | 9,700 | -14.3 | -4.0 |
| Government | 98,533 | 96,217 | 97,100 | 2.4 | -1.2 |
| Wholesale and Retail Trade | 101,017 | 100,117 | 101,200 | 0.9 | -1.4 |
| **Average Weekly Earnings** | | | | | |
| Manufacturing ($ Per Worker) | 490.70 | 468.86 | 489.72 | 4.7 | 2.8 |
| **Industrial Power Sales (000 Kwh)** | 603,768 | 581,170 | 107,646 | 3.9 | 5.5 |
| **Mortgage Loans Closed ($000,000)** | NA | NA | NA | — | — |
| **Bank Deposits ($000,000)[b]** | | | | | |
| Demand Deposits | 816 | 808 | 790 | 1.0 | -2.4 |
| Time and Savings Deposits | 1,167 | 1,119 | 1,153 | 4.2 | -0.1 |
| **Air Transportation** | | | | | |
| Passengers Enplaning (Number) | 739,222 | 712,346 | 148,623 | 3.8 | 8.9 |
| Passengers Deplaning (Number) | 745,131 | 718,198 | 151,396 | 3.8 | 12.2 |
| Freight Enplaned (Tons) | 3,737 | 3,297 | 661 | 13.3 | 17.9 |
| Freight Deplaned (Tons) | 4,756 | 4,921 | 818 | -3.3 | 7.6 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single-Family | | | | | |
| Dollar Value ($000) | 56,965 | 60,367 | 11,804 | -5.6 | 17.8 |
| Number of Units | 750 | 848 | 148 | -11.6 | 12.1 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 21,116 | 1,294 | 996 | E | -92.9 |
| Number of Units | 482 | 70 | 65 | 588.6 | -72.2 |
| Nonresidential | | | | | |
| Commercial ($000) | 15,940 | 31,381 | 228 | -49.2 | -84.8 |
| Industrial ($000) | 2,454 | 3,829 | 0 | -35.9 | — |
| Institutional ($000) | 5,641 | 8,593 | 450 | -34.4 | -81.8 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 10,986 | 39,487 | 768 | -72.2 | -75.3 |
| All Other Nonbuilding ($000) | 1,146 | 1,228 | 114 | -6.7 | -57.4 |
| Total Construction ($000) | 114,248 | 146,180 | 14,360 | -21.8 | -54.4 |
| **General Business Index** | 95.0 | 91.4 | 95.9 | 3.8 | -0.3 |

Note: Includes revisions.

[a] Civilian Labor Force.

[b] Deposits of large commercial banks (accounted for 36 percent of all commercial bank deposits as of December 31, 1988).

E = Exceeds 600 percent.

NA = Not Available.

# Business Highlights

## DAVID PENN

DATA FOR THE FIRST HALF of 1989 show that the Oklahoma economy may be settling down to a period of slower, but nonetheless positive, growth. The diminished rate of growth of the Oklahoma economy compared with 1988 is due partially to the slowing of the national economy and partially to the fact that the 1988 gains were accomplished from a diminished base.

Slower rates of growth appear in several indicators. The General Business Index, for example, showed little net change over the January-June period (graph). In addition, payroll employment rose by just 1.0 percent during the first half of 1989 from the first half of 1988 compared with a 1.9 percent gain from one year earlier. Manufacturing and services continued to show gains, but at a much slower pace. Mining employment fell by 3.1 percent during the first half, probably due to the unusally cold weather in February and very wet months of May and June. If this performance for payroll employment in the first half continues through the second half, 1989 will show less than half the increase achieved in 1988.

Retail sales show further evidence of a slowing state economy during the first half. Total retail sales in Oklahoma fell by 0.8 percent in the first half of 1989 compared with the first half last year, due largely to the large drop in auto sales. As shown in the figure, auto sales are a major source of volatility in Oklahoma's retail sales, fluctuating substantially from month to month. Retail sales excluding autos are much more stable over time. Excluding auto sales, retail sales increased 3 percent from the first half of 1988.

Retail sales in Oklahoma City were flat during the first half while Tulsa, Enid and Lawton showed declines. Of the major cities tracked in the Indicators, only the Muskogee area showed an increase from 1988.

While the situation on average for the first half was slightly negative, indicators for the month of June hint that the second half of 1989 will probably show some improvement. Auto sales staged a rebound in June, increasing by 1.8 percent. And, despite losses in categories such as household appliances, lumber and building materials, and drug stores, June retail sales rose a seasonally adjusted 4.2 percent; the biggest gain of the year. Only time will tell whether June marks the beginning of a new and higher trend for retail sales or whether the month was an aberration.

Further, very recent improvements in the labor market were demonstrated by falling unemployment rates. The 5.7 percent rate of unemployment for the state in June was the lowest rate for that month since 1982 and is close statistically to the U.S. rate for civilian workers of 5.3 percent.

Two recently released sets of data also deserve brief mention in the Highlights. Data collected and analyzed by the Center for Economic and Management Research for the Oklahoma Department of Commerce show that the cost of living is generally lower in Oklahoma than on average in the U.S. In 1988, for example, the cost of living in seven cities—Oklahoma City, Tulsa, Norman, Stillwater, Lawton, Muskogee and Enid—averaged just 93.4 percent of the U.S. cost of living as measured by the U.S. Consumer Price Index. Major categories included in the Oklahoma index are food, housing, utilities, transportation, health care and miscellaneous goods and services.

Of these categories, housing costs in Oklahoma were the lowest compared with costs in the U.S. Due to slack demand for residential real estate, housing costs for Oklahoma households averaged just 81 percent of U.S. average housing costs in 1988. On the other hand, health care costs in Oklahoma were 2.3 percent higher than the U.S. average. Additional details are available from the Center for Economic and Management Research.

The second set of data deserving mention are preliminary figures for state per capita income released by the U.S. Department of Commerce. These figures show that Oklahoma's income per capita rose 5.3 percent in 1988. By contrast, U.S. per capita income gained 6.2 percent. Of the states that surround Oklahoma, three states (Texas, Arkansas and Missouri) experienced gains greater than Oklahoma's. However, no state in the region grew as fast as the U.S. average.

Total personal income per person in Oklahoma averaged $13,269 in 1988, compared with $16,444 for the U.S. Oklahoma ranked 38th in the nation in 1988, one notch higher than in 1987 and the same ranking as in 1986. The 1988 ranking for the state ends a period of five years during which Oklahoma's relative standard of living fell every year. Thus, the slight improvement in Oklahoma's ranking suggests that the state's income per capita has stabilized relative to that of other states.

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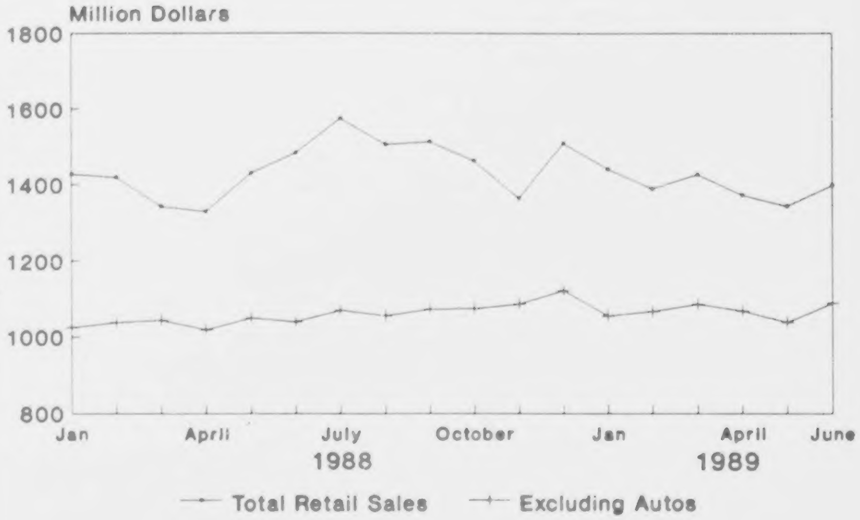
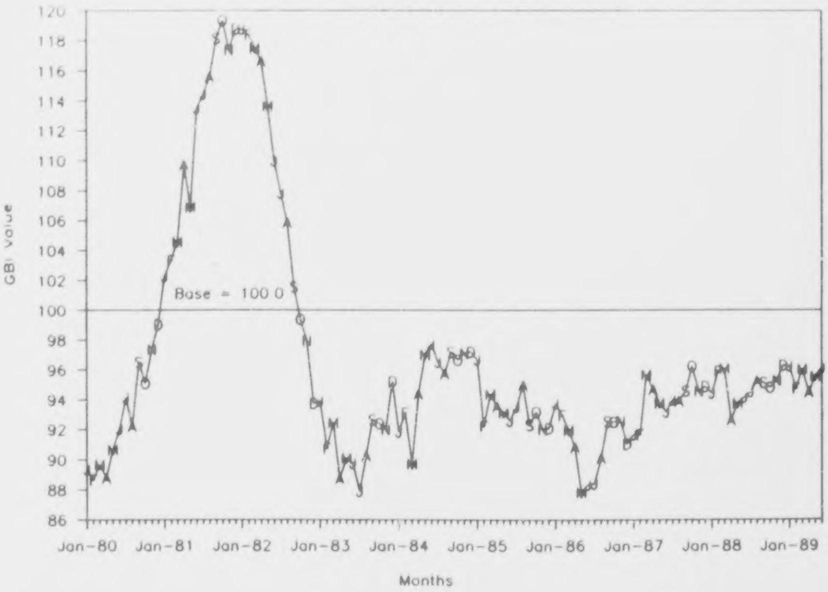
*David Penn is Assistant Director for the Center for Economic and Management Research.*

**Seasonally Adjusted Monthly Retail Sales**
**Oklahoma, 1988 - June 1989**



Data: CEMR

**Oklahoma State General Business Index**
**January 1980 through June 1989**



# An Analysis of the General Business Index

## CRAIG KNUTSON

THE FOLLOWING IS AN analysis of the economy for Oklahoma and its two largest metros during the 1st quarter 1989. The analysis will cover seven subsectors of the economy, with the subsector carrying the greatest amount of weight first, followed by the remaining subsectors in decreasing importance to the GBI. A look at the 2nd quarter 1989 is offered based upon preliminary data and professional intuition.

### Energy

The Energy Subsector declined 2.1 percent from the 1st quarter of 1988 and was off 1.2 percent from the 1st quarter of 1987. This quarter's decline represents the third consecutive quarterly decline for this subsector (when compared to the same quarter, previous year), and selected energy data through May and June should force the subsector down for a fourth consecutive decline next quarter. Once again, every indicator fell when compared to the 1st quarter of 1988, with seismic crew activity and intent-to-drill permits off the most (–31 percent each). That is particularly depressing for those in the energy patch, because it signals that activity will most likely be weak for the remainder of the year. With rig activity averaging less than 100 for the month of June, the signals those two leading indicators have been sending out appear to be quite accurate. While torrential rains distorted the rig count somewhat in June, May's average rig count of 114 continued a downward trend started late last year. Suffice it to say, Oklahoma's energy sector has problems, and those problems are likely to continue for, at least, the remainder of the year.

While oil prices (Oklahoma Sweet) moved steadily upward from $16.00/barrel to $19.50/barrel in the state during the 1st quarter, the 2nd quarter has been much more volatile. Oil prices posted by the major purchasers in state started the quarter at $19.50, moved as high as $20.25, as low as $18.50, and ended the quarter at $19.75/barrel. Those types of prices, despite their movement, should have generated much higher rig activity, especially when compared to price:rig trends over the past couple years. Again, discounting the weather conditions for June, the relationship between prices and rigs is weakening, at least in the state of Oklahoma.

This is not surprising as report after report informs the domestic producer (especially the independent) that exploration budgets are on the rise, but the targets are offshore or overseas. While Phillips' domestic exploration budget was increased due to a joint venture with several foreign companies, most majors (including Phillips) have a disproportionate amount of their budget offshore or overseas. Such investment does little to employ Oklahomans in Oklahoma or generate severance tax collections for the state. As the State Finance Director (Alexander Holmes) recently pointed out, "just six years ago, $1 of every $6 to the state's general fund came from oil taxes. For this year and next, it will be about $1 in every $25." Given the production and price forecasts over the next several years, the gap may become even larger.

Drilling completions were off 33.8 percent in the 1st quarter of 1989 nationally. Oil production in Oklahoma was off almost 20 percent in the 1st quarter and fell to 7.652mb/d nationally in March, 8.2 percent below 1988's total and matching production levels not seen since the 1960s! So, domestically produced supply continues to plummet, demand continues to rise, and, guess what, imports do too. We are now importing about 44 percent of our crude oil needs, and several reports have determined that our oil import rate could reach the 55-60 percent level before the year 2000. The IPAA said recently that for the first time since 1977, annual petroleum imports are forecasted to exceed domestic crude oil production. Through May, Petroleum Information estimates that imports have risen 12.5 percent over the same five month period in 1988. To add further volatility to the situation, almost 48 percent of all oil imports into the U.S. in 1988 came from OPEC countries.

OPEC has very quietly captured more market share, and their primary weapon has been low prices. OPEC, which supplies a third of the world's oil, has agreed on a higher output ceiling (19.5mb/d), yet still the price remains around $20.00. Why? Demand continues to rise and is expected to grow about 2 percent per year through the 1990s. With reserves nearly twice as expensive to replace in the U.S. as in the rest of the world, satisfying that increased demand apparently won't fall upon the shoulders of the domestic oil industry. With OPEC members sounding more and more like free marketeers ("It makes more economic sense to set production ceilings according to supply and demand forces"), look for prices to remain volatile, but low. With a new production ceiling of 19.5 mb/d recently agreed to by OPEC, members hope to better balance supply and demand in the 2nd half of 1989. The fact that they pumped an estimated 21.3 million barrels/day in June makes one wonder whether their intentions are sincere!

Before we leave the world of oil, it is important to remember that Oklahoma still has vast amounts of proven oil reserves, anywhere from 6-8 billion barrels. That oil is recoverable with advanced recovery technology, BUT, with the majors investing outside the state (or inside the state, but in the gas market), the burden of recovery has fallen upon the small operators and independents. Unfortunately, they don't have the "deep pockets" and research capabilities of the majors. A most perplexing problem, and one that isn't likely to be resolved without much higher prices in the future. The domestic energy industry (Oklahomans, in particular) has to keep in mind that most members of OPEC are convinced that relatively low prices are in their best interests in the long run. OPEC doesn't want to spur oil exploration in other areas or lose customers to alternative energy sources. As Robert Horton, Managing Director at British Petroleum, recently remarked: "In the short run, cheap oil keeps down natural gas and oil. In the longer run, these and others — including our exotic old friends like solar, shale, windmills and the atom — curb excess greed on the part of oil."

Things continue to improve in the "gaspatch." March gas prices in the state came in just under $1.90/mcf and the majors and independents continue their exploration activity in the Arkoma Basin in southeast Oklahoma (the world's richest natural gas reservoir). Through the first four months of calendar year 1989, severance tax collections off the sale of natural gas have accounted for 66 percent of the total (oil representing the other 34 percent). The term "gaspatch" truly is more representative of Oklahoma's energy market. Unfortunately, even with the recent surge, prices are still not high enough to boost U.S. and Oklahoma drilling activity. Some companies have begun to gear up for more natural gas drilling, hoping for higher prices this winter. But many in the industry feel that it would take a price of $3 "to really say 'let's get moving.'"

According to both private sector and governmental estimates, the natural gas resource base is "virtually inexhaustible." Unfortunately, the replacement rate for natural gas (new gas found versus gas produced) has fallen to 44 percent, even below the rate for the depressed oil industry. As one operator recently noted: "There is plenty of natural gas to meet demands well into the next century, but higher prices are a must to ensure adequate supplies." The more things change, the more they stay the same!

One very important issue was addressed during the 2nd quarter, and that was a bill that called for the decontrol of the natural gas industry. Proponents of decontrol have been complaining for years that the market needed to be deregulated (or at least less regulated) than it has in the past. They have maintained that the most effective energy policies are those that do not interfere with the way in which energy prices are set and do not attempt to regulate how energy is used. If the bill becomes law, the remaining one-third of the natural gas still being regulated will be deregulated, with all gas deregulated by 1993. The President supports the intent of the legislation currently in Congress and has vowed to sign the bill into law. While this country still does not have an "energy policy," it appears that steps are being made incrementally to improve the domestic climate in which gas and oil must compete. While the environmental benefits of increased natural gas use are well documented, gas has suffered from a poor transportation environment; there's plenty of distribution infrastructure, it's the agreements and regulations between those who have and want and those who'll deliver. Only time will tell, but the trends are more promising than they've ever been.

## Manufacturing

The Manufacturing Subsector was up 1.3 percent over 1st quarter 1988 and a sizeable 7.3 percent from 1987 levels. Both employment and weekly hours worked posted positive movements from last year, with employment up a seasonally-adjusted 2.2 percent and hours up 0.1 percent. However, the tax collections from the sale of industrial machinery, parts and equipment (IMPE) fell 17 percent, holding growth within this subsector down. Much of that decline came from the oil field equipment portion, which the Tax Commission has now merged with the IMPE class. That decline distorted the recent overall gains seen within the durable goods manufacturing sector. In fact, the Bureau of Economic Analysis' release of 4th quarter 1988 personal income numbers showed that manufacturing earnings in Oklahoma expanded

13 percent (in current dollars) from 4th quarter 1987, while the U.S. figure expanded only 6.7 percent over the same time period. In the durable goods portion, the gain was even more significant: up 18.1 percent vs. 7.4 percent nationally. That gain is probably not attributable to the production of pipe, pump, valves and rigs (i.e. the energy industry). Overall, the growth in manufacturing has been healthy and nonenergy-based.

May's manufacturing employment level (163,900) is almost 2,000 above last May and 8,000 above May 1987's level, signifying that the growth in this sector, while slow, has been steady. In fact, you'd have to go back to May 1985 before the comparison to May 1989 was negative. The trends in the two metros, while still positive, are not as strong, signifying that outstate manufacturing growth has been more pronounced. Cities like Anadarko, Ardmore, Blackwell, Commerce, Hugo, etc. have all received announced or actual manufacturing investments, as well as several cities within the two major metros and Lawton. The bulk of that growth has come in the Machinery category, but not oil field! The remainder is in the General Industrial and Electric and Electronic categories. While the data is very scant, Oklahoma has probably not taken full advantage of the weak U.S. dollar, which means that opportunities abound, especially with the State's new Foreign Credit Insurance Association program and OSU's Center for International Trade Development. According to the State's Department of Commerce, over $300 million in investment and 5,100 new manufacturing jobs were announced in the 1st half of this year in Oklahoma. While down from last year's record level, these numbers suggest that the manufacturing growth in Oklahoma is far from over.

The key to Oklahoma's manufacturing future — as with this country's — is to build and provide high quality goods and services more efficiently than others. In the past few years, the relative decline in the U.S. dollar against other currencies has helped repair the damage of the five years of a relatively strong dollar. But "playing global currency swings is hardly the route to renewed manufacturing strength." As was recently pointed out in *The Wall Street Journal*, 20 years ago U.S. manufacturers produced 82 percent of the nation's T.V.s, 88 percent of its cars, and 90 percent of the machine tools. Today, we make virtually no T.V.s, have lost 30 percent of the auto market, and 50 percent of the machine tool market. Furthermore, it is highly unlikely that we will regain much (if any) of the market share we've lost, even with fundamental retooling.

New management techniques and the application of improved technology have been the answer in those domestic plants that have restructured their productive activity. We should remember that currency exchange rates, much like energy prices, are highly volatile and, for the most part, unpredictable. If you don't want to build an economy around highly volatile energy prices, why would you want to around similarly volatile exchange rates. Japan, Germany, etc. have demonstrated that quality sells regardless of the negative fluctuations of exchange rates. With the dollar steadily rising since December of 1988, we are slowing losing one of our strongest advantages. While the trade deficits have been showing steady improvement (down to $8.3 billion in April!), they can reverse themselves, as have the currency rates. Our short term policy objective at the national level should be a renewed and coordinated effort to push down the value of the dollar. Our immediate and long term objective must be ranking first in worldwide economic competitiveness. Today, we're in third place; only with a retooling of both management technique and new technology can we expect to retain and/or recapture our market share. That retooling must take place in Oklahoma and become the rule not the exception.

## Consumer Demand

Despite improvements in many of the nominal (current dollar) tax and consumer numbers, this subsector continues to be a drag on the economy and GBI. The Consumer Demand Subsector fell over 4 percent from last year, due almost exclusively to weakness in the Apparel portion of the subsector. State sales tax collections were off an inflation-adjusted 2.9 percent from the 1st quarter of 1988, while General Merchandise tax collections rose 5.2 percent for the quarter. Sales tax collections returned to both Oklahoma City and Tulsa fell as well, as did the retail trade numbers in each metro. However, the 1st quarter was a relatively weak one overall, and with the Arts Festival, Air Show, the National Square Dance Convention (> 16,000 strong), the Centennial Celebration, and the start of the Olympic Festival all happening after March 31, look for much stronger numbers in the 2nd quarter for Oklahoma City. The August meeting of the National Conference of State Legislatures will have a very strong impact (along with the general improvement within the economy) on Tulsa's retail numbers. Thus, look for both metros (as well as the state) to get a boost from this sector of the economy for at least the next two quarters.

The issue of inflation is a concern to both economists and noneconomists alike. Referring back to the previous column, if our numbers had not been deflated by a "national CPI" that rose over 4.8 percent from last year, this subsector would have had a positive impact on the GBI. I have expressed consternation over the use of a national CPI for years, arguing that Oklahoma remains in a deflationary bubble, caused primarily by depressed housing values and relatively low transportation costs. A research project currently under way at the University of Oklahoma seeks to establish CPI values for the major metropolitan areas of the state. Their preliminary findings seem to support the notion that Oklahoma is, indeed, *not* contributing to the 5 percent YTD inflation rate reported nationally. If our dollar-denominated retail numbers were inflated instead of deflated, the true status of Oklahomans' purchasing power would be more accurately represented. And, of course, the GBI would benefit as well!

Interest rates, producer prices, consumer prices, and consumer borrowing all expanded in the 1st quarter and, despite those rises, consumer confidence in the economy continued to expand! The steady rise of interest rates over the past year had a significant impact on both housing and auto sales, although the auto industry did offer rebates and cut-rate financing programs. U.S. auto sales were off in both the 1st and 2nd quarters of 1989, yielding a 6.24 percent drop through the 1st half of the year. Furthermore, the Big Three continue to lose market share, with their combined share of cars sold in June of this year dropping to 68.1 percent from 69.9 percent last year. Thus, both the annual selling rate and market share figures have fallen. That does not bode well for the dealerships or for the manufacturers in the 2nd half of this year, as production plans are being scaled back. Metro Oklahoma City auto dealers, on the other hand, posted a 5.6 percent increase in the 1st quarter, with 2nd quarter numbers still not published.

With total personal income rising and consumer confidence remaining relatively strong (117. 5 in June 1989 vs. 115.7 in June 1988), it is difficult to forecast gloomy times for the remainder of 1989. As Fabian Linden, Executive Director of the Conference Board's consumer research center, recently stated: "Job security and sustained buying power of the weekly paycheck are contributing substantially to the consumer's sense of well-being. As long as the consumer remains in good spirits, there is faint likelihood that the economy will take a bad turn." With the Oklahoma's General Revenue Fund rising 28.4 percent in May (April's business) and April tax collections returned to both Oklahoma City and Tulsa up 7.7 percent and 3.6 percent, respectively, Oklahoma's business and consumer sectors are making healthy contributions to the state's fund. With more people working (and working at higher levels), more disposable income should be available to circulate in the economy. If April's business is any indication, the 2nd quarter will, indeed, be a strong one.

## Construction

The Construction Subsector was off a scant 0.6 percent in the 1st quarter signifying, at long last, some healing taking place. In fact, reports in the Oklahoma City metro have surfaced that such "upscale" locations as Oak Tree (Edmond), Nichols Hills, and parts of Norman are having "building booms!" The limited supply of high dollar homes, high per capita income, and the "quality of life," found in these locations make them the exception, not the rule, in this state's real estate market. The environment is still quite depressed. One need only to look at the portfolios of HUD and many of this state's thrifts to confirm the softness.

Residential permit activity in the 1st quarter for the state and both metros was actually UP, with the largest increase occurring in the Oklahoma City metro (up 24 percent). What continues to drag this subsector down is the lack of activity in the nonresidential side (off 8.2 percent in the state) and the poor performance of sales tax collections from the sale of building material (down 5.9 percent across the state). The nonresidential picture is even more depressed in metro Oklahoma City, with a 41.6 percent decline, while Tulsa actually posted an inflation-adjusted 1.9 percent increase. Keep in mind that with overall building at decade-low levels, wild monthly (and even quarterly) fluctuations can occur given the base from which the comparisons are drawn. Perhaps the best indication of where construction is in this state can be found in the employment numbers for May 1989. With 34,200 working in the Construction industry, one has to go back to 1967 to find a May value below that level! As I've repeatedly stated in this space, when supply and demand are not balanced, bad things will happen; and they will continue to happen until that balance returns.

As mentioned previously, rising interest rates hurt home sales nationwide, with *existing* home sales falling each month in the 1st quarter and continuing that trend into the 2nd quarter. In fact May's decline was the lowest level in 16 months. *New* single family home sales declined two of the three months of the 1st quarter, but, with mortgage rates easing at the start of the 2nd quarter, sales rebounded and posted two consecutive monthly increases. Despite those increases, home sales are still below last year's levels. The mortgage rate declines have been steeper in the ARM market than the fixed market, but both have declined, providing renewed hope for both the industry and the prospective homeowning public.

Oklahoma City and Tulsa have not followed that pattern. Oklahoma City home sales have exceeded the previous year's levels for each of the first six months of the year, while Tulsa posted a similar trend. While mortgage rates have been high in Oklahoma as well, what hasn't risen (and for some time now!), is the value of the structure being purchased. In virtually every geographic market, and especially in the major metros, sales have been rising while the value of those homes sold declines. The rare exception are those few "high dollar" subdivisions where larger homes are being built and/or sold at higher values. According to several national surveys, not only are Oklahoma City and Tulsa among the best places for first-time buyers, but they are among the lowest in housing market growth (fourth and second from the bottom, respectively) and resale value ($52,300 and $60,500, respectively)! With continued job creation and a plethora of highly affordable residential space available, housing affordability has become one of Oklahoma's chief economic development/marketing tools. Those who have relocated from the east and west coasts are the real beneficiaries, and remain our best spokespeople for bottom line, cost of living savings available in Oklahoma.

As mentioned at the outset, nonresidential activity is relatively nonexistent, and the nonbuilding sector, which buyoyed this industry for several years, is also weak. Minor occupancy rate increases in the two metros have caused a slight downward movement within the office markets (e.g. from 29.2 percent to 27.7 percent), but the environment is still weak. The best news is found in the new building permit data ... where there is none. Refurbishment/remodeling has put some new space on the market, but fortunately, overall space has been absorbed more quickly. Consensus among the "experts" is that three things are occurring: virtually no new space coming on line, fewer relocations of businesses out of the metros, and existing business expansions within the market. We need more of the former and latter and none of the in-between. Supply/Demand Imbalance is still in effect in nearly all Oklahoma nonresidential markets.

## Agriculture

This subsector continues to post sizeable gains, despite a recent slow down among its two major industries. For the 1st quarter, however, inflation-adjusted wheat prices 38.3 percent above last year's level and a whopping 53.3 percent from 1987 levels. Beef prices were up a scant 0.9 percent from last year, but up 11.3 percent from 1st quarter 1987. The primary concerns during the 1st quarter were the continued drought conditions in the Midwest and its impact on all types of crops (especially wheat) and the declining herd size and its impact on beef prices to the consumer. Those issues are still very real as we enter the 3rd quarter.

Estimates made in the spring called for wheat stockpiles falling below the 500 million bushel level by June 1990, their lowest level since 1973. Drought conditions in the Kansas, Western Oklahoma and the Texas Panhandle sent most estimates (quantity and quality) down. With worldwide demand for wheat continuing to rise, the inventory would be taken down. While the final tabulations are still being made due to record June rainfalls around the state, the estimated number of bushels for 1989 will fall 15-20 percent below last year's levels. Fortunately, due to the lateness in harvesting (too much rain) and the wheat orders from both Russia and China for additional wheat, prices rose dramatically in the 2nd quarter. Through mid-June, Oklahoma's wheat price has stabilized in the $4.00-4.10 range, about $1.25/barrel ahead of last year's level! As we enter the 3rd quarter, worldwide demand has escalated above previous forecasts, the harvested supply and quality of that harvest are likely to come in under the previous forecasts, therefore, agricultural income should post some sizeable gains in the 2nd and 3rd quarters of this year.

The beef industry, which accounted for 53 percent of all agricultural income in this state last year (and 97.5 percent of all meat animals), saw its prices rise steadily during the 1st quarter and drop through the 2nd quarter. Oklahoma's beef herd expanded 2 percent last year and income was up over 10 percent. The prospects for another good year were strong based upon increases demand and a shrinking nationwide herd size. Those prospects may yet materialize, but, for the most part, the 2nd quarter news about beef has revolved around the exportation of more beef to Japan (and elsewhere) and genetic improvements in future beef cattle. According to the research in this area, the world's population is seeking a higher quality diet, which means that there will be a continued, gradual change toward higher value-added and processed products, including meats. Oklahoma, through OSU's agricultural research, is an ideal candidate to invest in value-added processing and genetic research . . . and is doing so very effectively.

The near term future for agricultural income in this state remains strong. Prices remain high, farmland values continue to rise, and overall farm credit conditions in Oklahoma are much stronger than they have been in several years. Barring another attack from mother nature or a sudden drop in demand for our primary agricultural products, look for continued strength from the farm belt. But, also remember, that agricultural earnings, despite their recent strength, represented only 3.5 percent of total earnings in the State of Oklahoma in the 4th quarter of 1988! Perspective is important.

## Financial

Something shocking almost occurred within this subsector; a positive aggregate value was almost registered. Seasonally- and inflation-adjusted loan closings at state thrifts posted a 16.3 percent over the 1st quarter of 1988. Unfortunately, loan commitments fell and total deposits were off significantly from the year earlier. Any increase in the overall subsector would have to be viewed in a dim light given the net negative worth of the thrift industry, which today is much smaller and still relatively unhealthy. Oklahoma City thrifts were "less weak" than were Tulsa's, but less than half of the state's total are generating positive cash flow.

While the nation's banks earned $7.3 billion in net income during the 1st quarter of 1989, the nation's savings and loan industry recorded a $3.4 billion loss, rivalling the $3.9 and $4.1 billion losses of the 1st and 2nd quarters of 1988. No honest end is in sight. Not only are property values in some areas still falling (e.g. Oklahoma), but thrifts have been squeezed because their cost of funds have been rising faster than their mortgage rates. Pointing out once again the insidiousness of high interest rates. In Oklahoma, the 38 surviving S&Ls had a cumulative net income of -$30.7 million. Over 55 percent of them had negative net income and 84 percent of that net income loss came from the ten largest S&Ls (based upon asset size).

The banking situation, relative to its sister institutions, is much brighter in Oklahoma. Rubottom, Dudash, Assoc.'s Bank Stock Index (BSI) rose to its highest level in almost a year in June, 16.7 percent above March's level and 23 percent above year end 1988's level. However, everything being relative, the BSI, which represents the market value of Oklahoma's two largest publicly-traded banks, is still 15.2 percent below June 1988. The bottom, as forecasted six months ago, was reached and the overall condition of banks in this state continues to improve. In fact, combined positive net income was realized by BOK and BOMA in the 1st quarter of 1989 for the first time since 1st quarter 1987; the forecast among those brave enough to do so is for a second consecutive quarterly rise.

Perhaps the best news in the financial industry is interest rates have come down, which means borrowing will be less costly. That is especially important to the debt-ridden thrift industry, whose hope for improvement was dashed with each rise in interest rates over the past year. Most economists now forecast that if we are to have a "soft landing" as opposed to a recession, interest rates must fall further. The real trick is for the Feds to keep them there long enough for the financial industry to recover. That would probably have to be a record length of time, and given the volatile nature of interest rates, an unrealistic expectation. Nonetheless, banks and thrifts will continue their combined march toward higher/reaching positive net worth. With all the real estate that still must be disposed of in this state, look for the banking industry to lead the way.

## General

The General Subsector posted a rare increase, rising not only 2.1 percent over last year's level, but 0.4 percent over 1987's level. The primary contributors were many. In the employment area, the unemployment rate continued its fall in the 1st quarter (and has dropped again in April and May — 5.8 percent and 5.9 percent). More significantly, though, is the solid improvement seen in wage and salary employment, which is up a seasonally-adjusted 1.4 percent from last year and a stronger 3 percent from 1st quarter 1987. That means jobs are being generated. The Services industry continues to be a primary contributor to that rise, up 3.6 percent from 1988 and 9.3 percent from 1987. Keep in mind that the Services industry represents almost 22 percent of total wage and salary employment in this state (almost equal to government). In addition bankruptcies continued to fall (although the rate of decline has lessened) and personal income continued to rise. The strongest improvement came in Unemployment Insurance Claims, which fell 20.6 percent from last year. Fewer filings, more workers, and higher income; sounds like a logical sequence of growth to me.

Nationally, the 1st quarter was bizarre. Inverted yield curves (between short and long term interest rates) signified a recession was either here or imminent. Yet, both the budget and trade deficits were moving toward the 0 line. But the Fed continued to push interest rates higher, hurting auto and home sales as well as the thrifts, and the U.S. dollar began to show strength. That worried manufacturers and economists alike for fear that our export-based economy would lose what ground it had gained back over the past three years. The Commerce Department then told us that, although factories were running at 85 percent of capacity, both real and wage inflation was rising, and that foreign investors continued to hold a large lien on our future. Despite, these trends, GNP grew at a 4.4 percent annual rate in the 1st quarter! If Oklahoma did not have to balance its budget, I suspect our 1st quarter growth rate would have been much higher than the 0.2 percent posted through the GBI.

Nearly all the statistics reveal a softening in the economy. In fact, if one looks at quarterly GNP first differenced from 1987 forward, one can see an unmistakable slowing of growth. So, the Fed is not solely responsible for all the softness, just the most recent four quarters. Given their options, I think most would agree that they have successfully walked the tightrope, although I don't believe they've reached the end! As the 2nd quarter came to a close, stocks, bonds, interest rates and the U.S. dollar were all at higher levels than 2nd quarter 1988. For the first two indicators, that is good; for the latter two, that isn't. The good news, though, is that both interest rates and the dollar have begun to drop and will need to continue their drops to keep the economy from falling any further.

The keys to where the economy is headed in the 2nd half are tied to domestic monetary policy and international economic strength. The rise in the U.S. dollar has many concerned, especially manufacturers. In fact, for the first time since the 1987 stock market crash, the National Association of Manufacturers "considers a direct appeal to the Fed for lower rates, to bring down the dollar and to avoid choking off domestic growth." Many companies fear they will "lose international market share" if the dollar does not turn back down. The Fed, on the other hand, worries that cutting rates would fan inflation. Milton Friedman asserts that inflation, over the next two years, will actually decline; based upon that, implementing a policy of lower interest rates seems prudent. Mr. Friedman contends that changes in inflation are dominated by changes in the quantity of money for up to two years out. Since the growth in M2 has been declining, he expects that inflation" is likely to decline sharply over the next several years." *The Wall Street Journal's* semiannual survey of 38 economists shows that consensus has inflation declining, but only ever so slightly. Let's hope that Uncle Miltie is correct.

There is another school of thought, however, that says a stronger dollar is good for America. The keys to that thinking are: (1) a higher dollar lowers the prices of imports and discourages domestic producers from raising theirs, keeping inflation down; and (2) a higher dollar will encourage foreigners to continue to hold U.S. assets, easing pressure on interest rates. As with any theory, it needs to be well tested in the world economy; sounding logical alone does not make the next loan payment. A lower, stable dollar would, at least for the next several years, benefit our economy most. As Jane Little, research economist at the Federal Reserve bank of Boston, recently wrote: "It's apparent that large, protracted changes in exchange rates can transform an economy. The American economy is leaner, more efficient, and more globally minded than it was a decade ago." Retooling for quality takes investment and time. We (and foreigners who invest here) are making the investments; what we need is a bit more time.

Perhaps the best hope for continued domestic expansion is found outside the U.S. Forecasts for continued growth in exports rely heavily upon several factors: a low dollar, increased investment in new plant and equipment, improved productivity, and a *healthy* international economy. In other words, no matter how productive you may be or how much quality you put into the goods and services you produce, if you don't have a buyer, you don't have a sale. And, if you don't have a sale, ... The Organization for Economic Cooperation and Development (OECD) offered a "sunny picture of the world economy," although did stress the perils of "creeping inflation" and "protectionist trade fortresses" among the major industrial countries. OECD growth rates are expected to stay around 3 percent for the remainder of this year and next. But in Germany and Japan, strong markets for our exports, the growth patterns are even stronger. For instance, in the 1st quarter of 1989, West Germany's economy grew at 12.5 percent annual rate; Japan's was right behind at 9.1 percent. While those countries will not continue at that pace through the rest of this decade, their growth will outstrip that of other OECD countries. They have the cash, therefore, they have the best potential for making the purchases.

## Conclusion

Despite the doom and gloom forecasted by most, I stand by my forecast made in 1988 of NO RECESSION in 1989 or 1990. As has been remarked frequently, economic expansions don't die of old age, they are usually killed by poor policies, most frequently monetary policies. The Fed's "credit easing" policy appears to be the correct policy to employ; let's just hope it wasn't too late! Regardless, the nation must learn to live with slower growth. Oklahomans have had to adjust their expectations during the decade of the 1980s, learning that heavy reliance upon commodities over which you have no control (of either production or prices worldwide) can be devastating. Oklahoma's employment and income gains over the past two years have not come from traditional industry sources. As time passes, we realize that, as our economic base diversifies, we look more and more like the national economy. We are becoming more cyclical (or less counter-cyclical) with the U.S. economy. Therefore, if the U.S. economy is going to slow, guess what we in Oklahoma are likely to do? While I expect the 1st quarter GBI to represent the low point of the year, I find no economic basis for growth rates to exceed those of the U.S. So "don't worry" about slow growth, just "be happy" that we have growth!

The internationalization of economies has forced us to change; our national debts have forced us to become more competitive, yet to rely upon the "cash rich" to fund more and more of these "competitive-enhancing" investments. This is the Marshall Plan in reverse, only our economy is not nearly so devastated as were Japan's and Europe's. While we were building new plants in the late 40s and early 50s, the foreign direct investment we're seeing in this country in the 80s is primarily mergers and acquisitions of existing manufacturing plants, not the construction of new facilities. The Commerce Department estimates that "foreign investment in the U.S. now amounts to $304.2 billion — almost as much as the $329.9 billion total that U.S. companies have invested overseas." Since most of our assets were acquired years ago, they state that: "given those accounting effects, we probably still have two to three times as much investment abroad as foreigners have here." It's in their best interest, just like it was (and still is) in our best interest, to help rebuild this economy. If we're not healthy, who is going to buy all those BMWs and SONYs . . . Brazil, Mexico, India?

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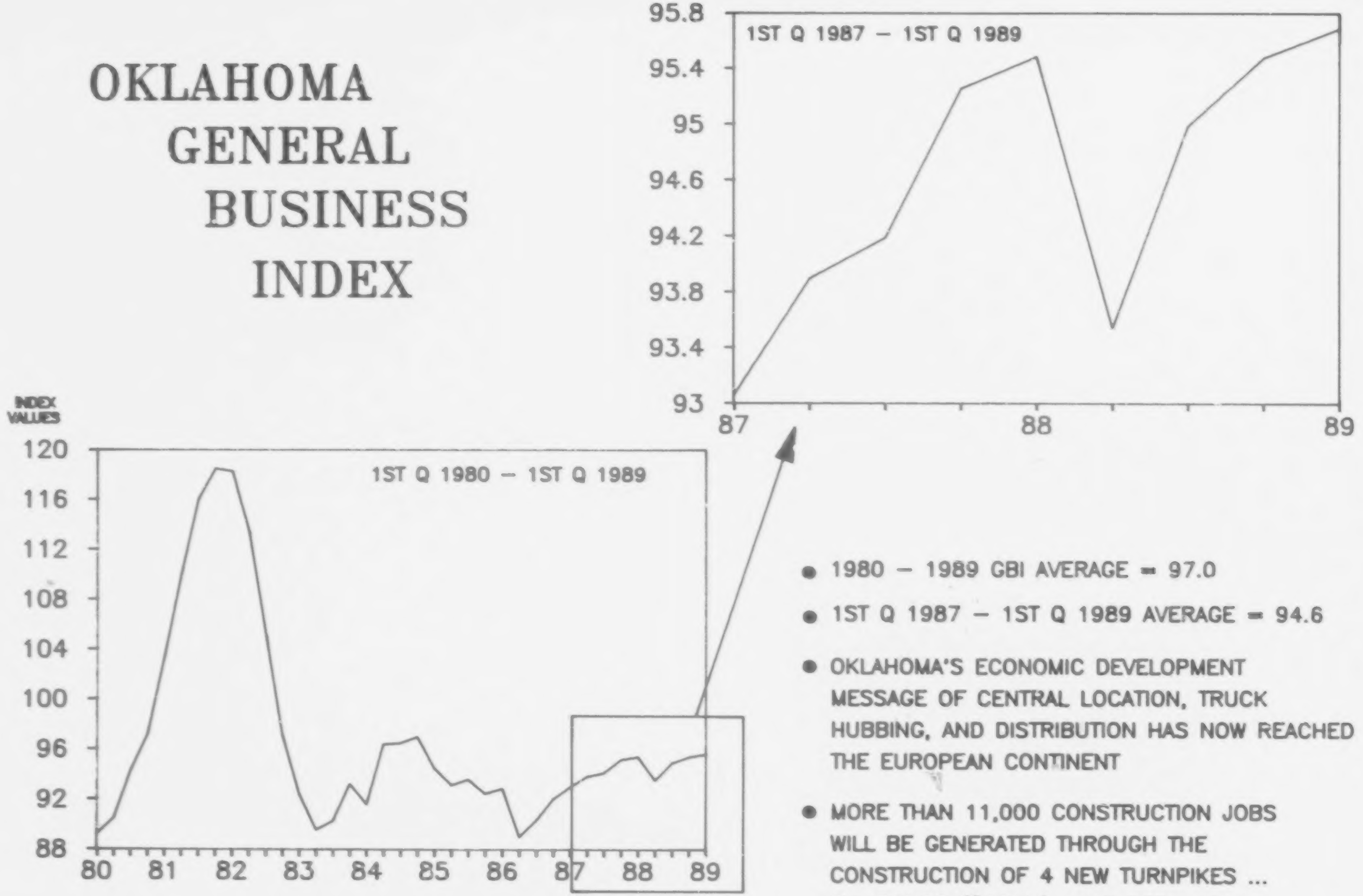
# OKLAHOMA GENERAL BUSINESS INDEX



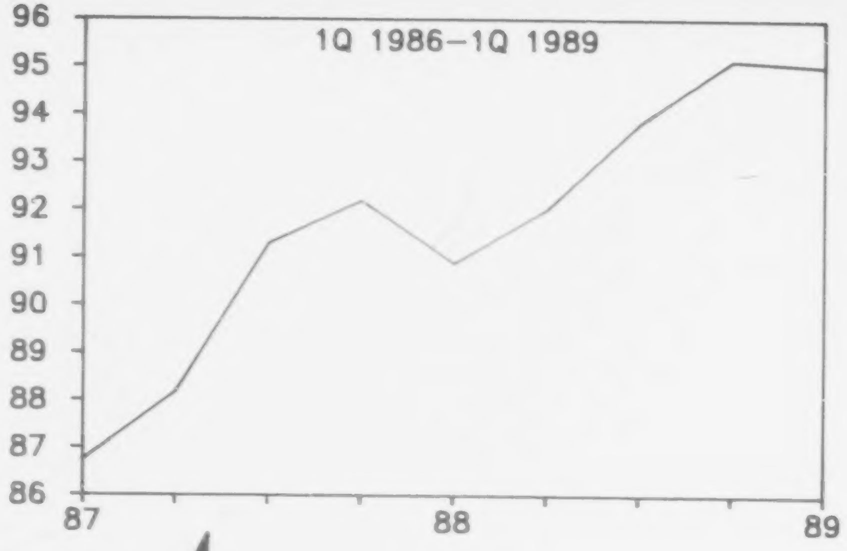
- 1980 – 1989 GBI AVERAGE = 97.0
- 1ST Q 1987 – 1ST Q 1989 AVERAGE = 94.6
- OKLAHOMA'S ECONOMIC DEVELOPMENT MESSAGE OF CENTRAL LOCATION, TRUCK HUBBING, AND DISTRIBUTION HAS NOW REACHED THE EUROPEAN CONTINENT
- MORE THAN 11,000 CONSTRUCTION JOBS WILL BE GENERATED THROUGH THE CONSTRUCTION OF 4 NEW TURNPIKES ... ALL BONDS ($555M) HAVE BEEN SOLD

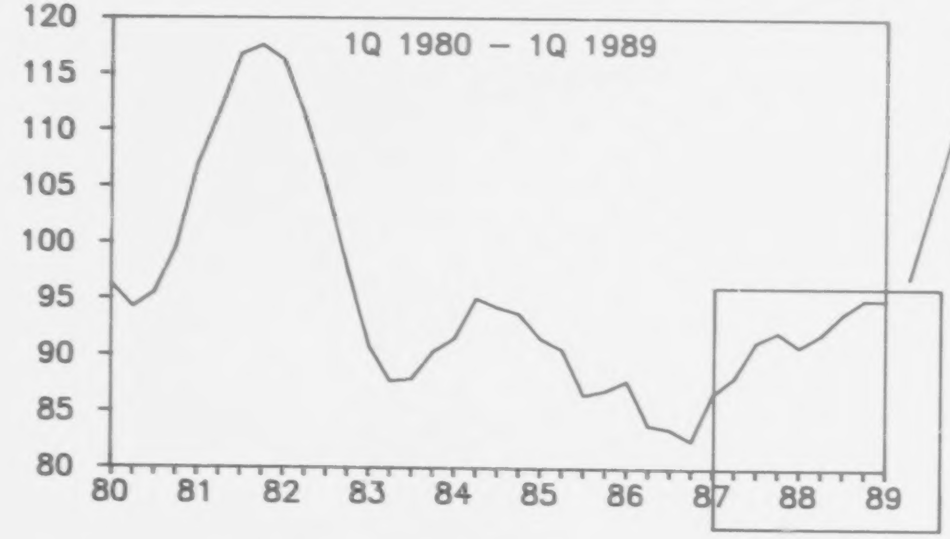
| 1Q 1989 AVERAGE VALUE | 4Q 1988 AVERAGE VALUE | %[1] CHANGE | 1Q 1988 AVERAGE VALUE | %[1] CHANGE | 1Q 1987 AVERAGE VALUE | %[1] CHANGE |
|---|---|---|---|---|---|---|
| 95.7 | 95.5 | 0.2 | 95.1 | 0.6 | 93.1 | 2.8 |

[1] COMPARED TO CURRENT QUARTER

SOURCE: SWBT ECONOMIC DEVELOPMENT DISTRICT/CEMR

# OKLAHOMA CITY GENERAL BUSINESS INDEX



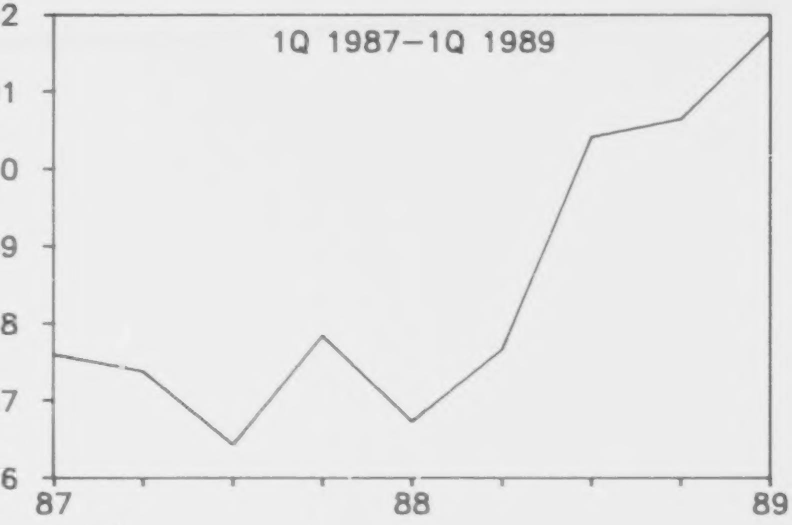


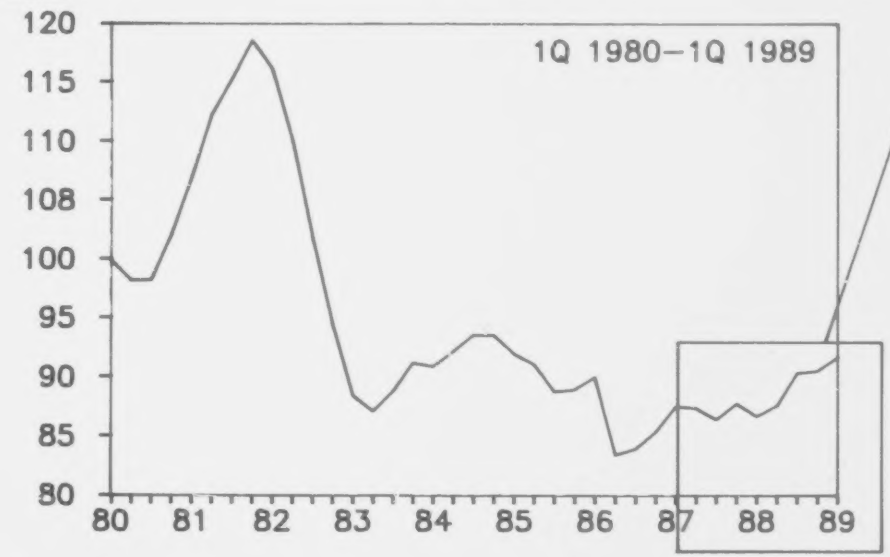
| 1Q 1989 AVERAGE VALUE | 4Q 1988 AVERAGE VALUE | % CHANGE[1] | 1Q 1988 AVERAGE VALUE | % CHANGE[1] | 1Q 1987 AVERAGE VALUE | % CHANGE[1] |
|---|---|---|---|---|---|---|
| 95 | 95.1 | –0.1 | 90.8 | 4.6 | 86.7 | 9.5 |

[1] COMPARED TO CURRENT QUARTER

- 1980 – 1988 GBI AVERAGE = 95.1
- 1ST Q 1987 – 1ST Q 1989 AVERAGE = 91.7
- SEVERAL MEDIUM SIZED FIRMS ANNOUNCED PLANS TO RELOCATE OR EXPAND JOBS IN THE METRO (MAC TOOLS INC, CHROMALLOY, McDONNELL DOUGLAS TRAINING SYSTEMS, INC)
- MILITARY CONSTRUCTION PROGRAMS AT TINKER ARE EXPECTED TO TOTAL $399 MILLION OVER THE NEXT 5 YEARS

# TULSA GENERAL BUSINESS INDEX





| 1Q 1989 AVERAGE VALUE | 4Q 1988 AVERAGE VALUE | % CHANGE[1] | 1Q 1988 AVERAGE VALUE | % CHANGE[1] | 1Q 1987 AVERAGE VALUE | % CHANGE[1] |
|---|---|---|---|---|---|---|
| 91.8 | 90.6 | 1.3 | 86.7 | 5.8 | 87.6 | 4.8 |

[1] COMPARED TO CURRENT QUARTER

- 1980 – 1989 GBI AVERAGE = 94.6
- 1ST Q 1987 – 1ST Q 1989 AVERAGE = 89
- KIMBERLY CLARK AND STATE FARM ARE MORE THAN "ANNOUNCEMENTS", WITH PLANT CONSTRUCTION ($250M/$40M) AND HIRING (250/450 JOBS) WELL UNDER WAY
- THE AVIATION INDUSTRY CONTINUES TO EXPAND IN TERMS OF EMPLOYMENT (AMERICAN AIRLINES) FACILITIES (TULSA INTERNATIONAL AIRPORT), AND EQUIPMENT (AMERICAN AIRLINES' SABRE COMPUTER SERVICES)

SOURCE: SWBT ECONOMIC DEVELOPMENT DISTRICT/CEMR

# *Oklahoma High Technology Industrial Performance, 1982-1987*

GERALD M. LAGE
TABITHA DOESCHER

## Introduction

THE POPULAR EMPHASIS of economic development research, policy initiatives and community action programs in the 1970s and early 1980s was clearly on recruitment and encouragement of high technology manufacturing establishments. As pointed out in a publication highlighting Oklahoma's status in the interstate competition, the underlying rationale for this concentration was "...the pervasive notion that growth of high technology or knowledge-intensive economic activity is a dominant component of future economic success. Such activities are viewed as having high growth potential, substantial employment benefits in terms of numbers of workers and quality of work satisfaction, few negative environmental impacts, international market potential, the ability to attract linked activities, and the potential for inducing accompanying improvements in infrastructure, public services, and quality of life." (Doescher, 1985)

The purpose of this article is to investigate the performance of Oklahoma's high technology sector from 1982 to 1987. The early benchmark study, which used data from 1982, revealed that Oklahoma's high tech sector, as measured by employment shares in designated industries, was small relative to the surrounding states and the nation. The study also indicated that the sector was dominated by a small number of manufacturing industries in the areas of Aircraft and parts; Communication equipment; Office, computing and accounting machines; and Petroleum refining.[1] Only Petroleum refining, Aircraft and parts, and Agricultural chemicals had state employment shares exceeding the national average. The desire and, by consensus, the need to grow and diversify in the preferred high tech sectors was readily endorsed as part of state economic development plans of the period. (Olson, 1986)

Unfortunately, the results of the present study indicate that Oklahoma has not succeeded in the goal of expanding employment in the high technology industries. Employment in the industries most often defined to be in the high technology category fell by 6.5 percent from 1982 to 1987. This loss is smaller than the 14.6 percent decline in total Oklahoma manufacturing employment and may be less than corresponding losses elsewhere; but, nevertheless, only one of the four industries that dominate this sector gained employment.

The high technology sector, which employed 23 percent of the manufacturing workers in 1982, accounted for one-third of the recorded new job announcements as collected by the Oklahoma Department of Commerce. Thus, there would appear to be considerable reallocations and new activity even as actual employment declines in many industries exceed the anticipated job additions. The Office machines and computer industry is the one large and growing high technology industry in the state, but its growth was barely large enough to offset declines in other selective, technology-intensive industries including Communication equipment, Aircraft and parts, and Petroleum refining.

What can be observed is that a substantial share of Oklahoma's high technology industries is linked to the energy market and these industries, almost uniformly, have contracted since 1982. These losses tend to outweigh other gains that may occur in certain other new and expanding businesses. The results do not indicate that Oklahoma has been misled with advice to place emphasis on the sector, but they do indicate that the five years of regional recession during national recovery have prevented any significant net gains from appearing.

## U.S. and Oklahoma Economic Environments

The period of the early and mid-1980s was not an easy time for local and regional industrial development in Oklahoma. The decade began with the repercussions of the second oil-price rachet, two closely-spaced national recesssions at the start of the decade, and a lengthy period of severe world-wide recessions in most advanced developed economies. National and world-wide growth was reestablished in the mid-80s and the dollar finally peaked in February of 1985.[1] Somewhat later the loss of export markets finally stopped as U.S. and Oklahoma producers recoiled, at least where the state's competitive advantages were the greatest.

The state's economic growth, which had been generally overheated and which had certainly specialized in oil and gas activity for most of the late seventies, was abruptly halted in mid-1982, and for the next half-dozen years little progress could be seen in net measures of economic activity.

Selected highlights of the recent growth pattern of major manufacturing industries are shown in Table 1. The severity of the competitive pressures on the state's manufacturing sector is shown by the loss of 23,500 manufacturing jobs from the nearly 185,000 full and part-time workers employed in manufacturing in 1982. Among the state's largest industries (those with employment shares above five percent), only Printing and publishing, Stone, clay, and glass products and Transportation equipment did not lose workers over this period. The Fabricated metal products and both the Electrical and Nonelectrical machinery industries each lost large numbers of jobs.

Over this period, however, other economic reallocations and dislocations were occurring as indicated, although roughly and incompletely, by Oklahoma Department of Commerce's new job announcements. These reports indicate that nearly 35,000 new jobs from new plants and expansions of existing establishments were planned and publicly announced even as the net job count was falling substantially.[2] Industries most favored with anticipated jobs relative to the size of the industry in 1982 (see final column) were

**TABLE 1**

**Oklahoma and U.S. Industrial Performance**

| SIC | Industry | U.S. Real GNP Growth Rate[a] 1980/1986 (%) | U.S. Export Share[b] 1986 (%) | U.S. Import Share[c] 1986 (%) | Oklahoma Employment Share[d] 1982 (%) | Oklahoma Employment Growth[e] 1982-87 (#) | Oklahoma Job Announcements[f] 1983-88 (#) | Jobs from Expansions (%) | Ratio of Announcements to 1982 Jobs[g] |
|---|---|---|---|---|---|---|---|---|---|
| 20 | Food and kindred products | 1.7 | 3.9 | 4.2 | 8.2 | -940 | 2,918 | 50 | 1.01 |
| 22 | Textile mill products | 0.9 | 3.9 | 8.4 | 0.6 | 11 | 349 | 91 | 1.72 |
| 23 | Apparel and products | -0.4 | 2.1 | 24.5 | 5.1 | -966 | 3,059 | 47 | 1.69 |
| 24 | Lumber & wood products | 0.9 | 5.5 | 10.2 | 1.9 | -207 | 918 | 28 | 1.36 |
| 25 | Furniture and fixtures | 1.8 | 1.5 | 10.6 | 1.2 | -361 | 262 | 61 | 0.62 |
| 26 | Paper & allied products | 4.0 | 4.7 | 7.3 | 1.7 | 202 | 923 | 98 | 1.55 |
| 27 | Printing & publishing | 2.3 | 1.2 | 1.4 | 6.5 | 305 | 853 | 72 | 0.37 |
| 28 | Chemicals & allied products | 2.9 | 11.9 | 6.7 | 1.9 | -179 | 537 | 18 | 0.82 |
| 29 | Petroleum & coal products | -0.2 | 3.6 | 9.8 | 4.7 | -1,609 | 67 | 15 | 0.04 |
| 30 | Rubber & miscellaneous & plastics | 5.5 | 4.1 | 6.9 | 6.0 | -402 | 2,203 | 73 | 1.05 |
| 31 | Leather & leather products | -5.8 | 7.3 | 56.7 | 0.3 | -24 | 5 | 40 | 0.05 |
| 32 | Stone, clay & glass products | 0.8 | 3.2 | 8.3 | 5.7 | 163 | 1,290 | 45 | 0.64 |
| 33 | Primary metal products | -4.6 | 3.6 | 16.8 | 2.7 | -1,005 | 516 | 90 | 0.54 |
| 34 | Fabricated metal products | 0.7 | 4.5 | 6.0 | 12.2 | -8,169 | 1,914 | 48 | 0.44 |
| 35 | Non-electrical machinery | 10.1 | 20.1 | 16.9 | 21.3 | -8,803 | 5,581 | 74 | 0.74 |
| 36 | Electronic equipment | 5.2 | 10.8 | 18.5 | 6.8 | -3,341 | 4,788 | 89 | 2.00 |
| 37pt | Motor vehicles & equipment | 4.7 | 9.3 | 26.4 | {9.3 | {3,057 | {6,306 | {81 | {1.92 |
| 37pt | Transportation equipment except MV | 4.1 | 18.1 | 8.1 | | | | | |
| 38 | Instruments | 5.3 | 16.5 | 16.0 | 2.0 | -1,072 | 778 | 83 | 1.08 |
| 39 | Miscellaneous manufacturing | 6.0 | 9.3 | 37.5 | 1.9 | -194 | 2,031 | 9 | 2.95 |
| | Total Manufacturing | 3.4 | 8.2 | 12.9 | 100.0 | -23,534 | 35,298 | 65 | 1.00 |

[a] Average annual rate. Source: U.S. Department of Commerce, Bureau of Economic Analysis, GNP Estimates.

[b] Percent exports to shipments. Source: U.S. Department of Commerce, unpublished data.

[c] Percent imports to new supply (imports plus shipments). Source: see footnote b.

[d] Percent of total manufacturing employment. Source: Bureau of Economic Analysis, full and part-time employment, unpublished.

[e] Source: see footnote d.

[f] Source: Oklahoma Department of Commerce. Annual Listing of Announced New and Expended Manufacturers and Processors, annual 1983-1988.

[g] Ratio of percent share of 1983/88 jobs announced divided by percent share of 1982 manufacturing employment.

Miscellaneous manufacturing, Electrical machinery and Transportation equipment. The Textile mill products, Apparel and Paper products industries also reported relatively numerous new investments.

## High Technology Definitions

Three analytical definitions of "high technology industries" have become standards for comparative analyses of industrial performance. (Riche, et al., 1983, and Lage, 1985). These alternative definitions are detailed in the headings of Table 2.

The core *high tech sector* consists of 28 manufacturing industries with relatively high ratios of both research and development (R&D) expenditures and technology-oriented workers. The *high tech R&D sector* is a select group of just six industries which have extremely high ratios of R&D expenditures to net sales (ratios exceeding twice the national average and which are above the chosen cut-off of 6.2 percent). These industries include Drugs; Office, computing and accounting machines; Communication equipment; Electronic equipment and accessories; Aircraft and parts; and Guided missiles and space vehicles.[3]

Finally, a *technology-based sector* is defined for industries in which the proportion of technology-oriented workers is at least one and one-half times the average for all industries. The sector is a broad collection of the 28 core high tech manufacturing sectors plus 20 other industries, not all of which are manufacturing, which utilize relatively large numbers of scientific and technical workers. They do not necessarily engage in considerable R&D activities nor offer high technology products or services.

## Oklahoma Industrial Performance

For comparative purposes, we note that between 1982 and 1987 Oklahoma's total nonagricultural employment fell from 1,216,900 workers to 1,105,000. This represents a loss of 9.2 percent in total and an average of 1.9 percent per year. (Oklahoma Employment Security Commission) Total manufacturing employment, according to OESC data, fell from 180,600 in 1982 to 154,300 in 1987—a loss of 14.6 percent total and 3.1 percent per year.

***High Tech Sector:***[4] Oklahoma's core high tech sector of 28 manufacturing industries (those indicated by * in Table 2), which had 41,500 workers in 1982, netted a loss of 6.5 percent of these workers by 1987 to 38,900. Nevertheless, with the substantial losses in total manufacturing, the share of high tech employment actually rose from 23.0 to 25.2 percent of all manufacturing workers. Similarly, workers in the high tech sector accounted for 3.5 percent of all nonagricultural workers in 1987, up just slightly from the 3.4 percent share in 1982.

In terms of public job announcements, 11,500 of the 35,300 jobs announced from 1983 through 1988 were in the high technology sector. Thus, one-third of the announcements of new and expanded activities were in this sector compared to the 20-25 percent of actual manufacturing jobs.

When individual industries in the high tech sector are reviewed, four industries dominate: Petroleum refining (SIC 291); Office, computing and accounting machines (SIC 357); Communication equipment (SIC 366); and Aircraft and parts (SIC 372). In 1982 they employed about 65 percent of all high tech sector workers; by 1987 their share had risen to 68.5 percent. Within the group, the share of Aircraft and parts doubled from 11 to almost 22 percent, while Communication equipment fell from 15 to 10 percent of the sector's employment.

Industries in the high tech sector with average annual growth in excess of 2.0 percent per year include: (number shown in parentheses is average annual growth)

SIC 282—Plastic materials and synthetics (14.2%)
SIC 357—Office, computing & accounting machines (13.0%)
SIC 289—Miscellaneous chemical products (12.2%)
SIC 386—Photographic equipment and supplies (10.6%)
SIC 284—Soap, cleaners and toilet goods (7.1%)
SIC 367—Electronic components and accessories (2.1%)

and a combination sector consisting of SIC 348 (Ordinance and Accessories), SIC 351 (Engines and Turbines), and SIC 383 (Optical Instruments and Lenses), which had to be aggregated because of data disclosure restrictions. In fact, this group grew by nearly 150 percent or 20 percent per year. Both the Office, computing and accounting machines and Electronic component industries had employment exceeding 1,000.

Industries with average annual job losses of 6.0 percent or more include:

SIC 381—Engineering, laboratory, scientific and research instruments (-24.9%)
SIC 286—Industrial organic chemicals (-16.7%)
SIC 382—Measuring & controlling instruments (-16.5%)
SIC 355—Special industrial machinery, except metalworking (-16.5%)
SIC 261—Elec. transmission & dist. equip. (-12.2%)
SIC 287—Agricultural chemicals (-10.3%)
SIC 366—Communication equipment (-10.0%)
SIC 365—Radio & TV receiving equipment (-9.2%)
SIC 283—Drugs (-7.0%)

Of these, Communication equipment, Electric transmission and distribution equipment, and Measuring and controlling instruments employed more than 1,000 workers in 1982.

When reviewing the impact of new and expanded job announcements in individual industries within the high tech sector, over half (67.9 percent) came from just two industries, Communication equipment (SIC 366) and Aircraft and parts (SIC 366). The bulk (89.4%) of these new jobs were attributable to the expansion of existing

## TABLE 2

## Oklahoma's Technology-Based Industries

| SIC CODE | Industry | Oklahoma Employment[a] 1982 (#) | Employment Change[b] 1982-1987 (#) | Job Announcements[c] 1983/1988 (#) | Jobs from Expansions (%) | Number of Establishments[d] 1986 (#) | Change in Establishments 1982/1986 (#) |
|---|---|---|---|---|---|---|---|
| | **Mining** | | | | | | |
| 131 | Crude petroleum and natural gas | 41,030 | -15,902 | | | 1,229 | 21 |
| | **Construction** | | | | | | |
| 162 | Heavy construction, except highway & street | 10,770 | -5,512 | | | 487 | -46 |
| | **Manufacturing** | | | | | | |
| *281 | Industrial inorganic chemicals | 1,230 | -146 | 48 | 54 | 27 | 8 |
| *282 | Plastic materials and synthetics | 70 | 66 | 0 | — | 3 | -2 |
| **283 | Drugs | 300 | -91 | 15 | 0 | 11 | 2 |
| *284 | Soap, cleaners, & toilet goods | 210 | 86 | 144 | 21 | 13 | 0 |
| *285 | Paints and allied products | 330 | -28 | 10 | 100 | 12 | -2 |
| *286 | Industrial organic chemicals | 20 | -12 | 154 | 0 | 6 | 3 |
| *287 | Agricultural chemicals | 880 | -369 | 0 | — | 11 | -3 |
| *289 | Miscellaneous chemical products | 340 | 265 | 87 | 0 | 26 | -4 |
| *291 | Petroleum refining | 7,600 | -965 | 0 | — | 15 | -7 |
| 301 | Tires and inner tubes | 7,060 | -1,455 | 1,048 | 100 | 7 | -1 |
| 324 | Cement, hydraulic | 530 | -60 | 0 | — | 5 | 1 |
| *348 | Ordinance & accessories, excluding vehicles & guided missiles | 50 | n.a. | 100 | 0 | 3 | 0 |
| *351 | Engines and turbines | 720 | n.a. | 257 | 69 | 6 | 0 |
| 352 | Farm and garden machinery | 760 | -445 | 66 | 50 | 25 | -5 |
| 353 | Construction, mining & material handling machines | 18,080 | -8,530 | 2,133 | 96 | 132 | -28 |
| 354 | Metalworking machinery | 710 | -135 | 56 | 46 | 40 | -7 |
| *355 | Special industrial machinery, except metalworking | 980 | -583 | 31 | 100 | 33 | -3 |
| 356 | General industrial machinery | 6,880 | -2,067 | 1,048 | 58 | 95 | -3 |
| **357 | Office, computing and accounting machines | 4,580 | 3,876 | 1,102 | 73 | 24 | 5 |
| 358 | Refrigeration & service industry machinery | 1,860 | 98 | 732 | 39 | 21 | -8 |
| *361 | Electric transmission and distribution equipment | 1,260 | -603 | 78 | 0 | 7 | 2 |
| *362 | Electrical industrial apparatus | 1,560 | -84 | 477 | 69 | 16 | -1 |
| 363 | Household appliances | 90 | 4 | 52 | 98 | 2 | 1 |
| 364 | Electric lighting & wiring equipment | 400 | 90 | 80 | 44 | 12 | -2 |
| *365 | Radio & TV receiving equipment | 480 | -183 | 33 | 100 | 9 | 2 |
| **366 | Communication equipment | 6,310 | -2,592 | 3,632 | 95 | 26 | 3 |
| **367 | Electronic components & accessories | 1,880 | 202 | 226 | 73 | 43 | 10 |
| *369 | Misc. electrical equipment & supplies | 160 | -28 | 251 | 93 | 21 | 8 |
| 371 | Motor vehicles and equipment | 6,830 | 4,707 | 1,205 | 87 | 67 | -17 |
| **372 | Aircraft and parts | 8,980 | -1,147 | 4,214 | 84 | 24 | 4 |
| **376 | Guided missiles & space vehicles | 0 | 0 | 0 | — | 0 | 0 |
| *381 | Engineering, laboratory, scientific, and research instruments | 320 | -264 | 0 | — | 9 | -2 |
| *382 | Measuring & controlling instruments | 2,420 | -1,144 | 60 | 83 | 23 | -3 |
| *383 | Optical instruments & lenses | 60 | n.a. | 0 | — | 4 | 0 |
| *384 | Surgical, medical & dental instruments | 590 | -10 | 316 | 72 | 30 | 4 |
| *386 | Photographic equipment & supplies | 230 | 151 | 320 | 100 | 6 | -2 |
| | Combination 348, 351 and 383 | — | 2,065 | — | — | — | — |
| | ****Total High Tech R&D** | 22,050 | 248 | 9,189 | 87 | 128 | 24 |
| | ***Total High Tech** | 41,560 | -2,668 | 11,555 | 82 | 408 | 22 |
| | **Total Tech-Based** | 84,760 | -10,461 | 17,975 | 81 | 814 | -47 |

TABLE 2 (continued)

Oklahoma's Technology-Based Industries

| SIC CODE | Industry | Oklahoma Employment[a] 1982 (#) | Employment Change[b] 1982-1987 (#) | Job Announcements[c] 1983/1988 (#) | Jobs from Expansions (%) | Number of Establishments[d] 1986 (#) | Change in Establishments 1982/1986 (#) |
|---|---|---|---|---|---|---|---|
| | **Utilities** | | | | | | |
| 483 | Radio and TV broadcasting | 2,860 | 12 | | | 131 | 14 |
| 489 | Communication services, N.E.C. | 1,500 | 20 | | | 108 | 7 |
| 491 | Electric services | 7,950 | 650 | | | 132 | -22 |
| 493 | Combination electric, gas and other utility services | 0 | 513 | | | 9 | 3 |
| | **Wholesale Trade** | | | | | | |
| 506 | Electrical goods | 3,960 | -1,118 | | | 344 | 23 |
| 508 | Machinery, equipment & supplies | 29,340 | -12,123 | | | 1,799 | -70 |
| | **Services** | | | | | | |
| *737 | Computer & data processing services | 2,320 | 966 | | | 226 | -4 |
| *7391 | Research & development laboratories | 130 | 524 | | | 17 | 0 |
| 891 | Engineering, architectural, and surveying services | 6,920 | -447 | | | 629 | 9 |
| 892 | Noncommercial educational, scientific, and research org. | 580 | -56 | | | 14 | -11 |
| | **Total Employment, Technology-Based Sector** | 192,120 | -42,934 | | | 5,939 | -123 |

*High tech industries.

[a] Source: unpublished data, Oklahoma Employment Security Commission.

[b] Source: see footnote a, Table 1.

[c] Source: see footnote f, Table 1.

[d] *County Business Patterns*, U.S. Department of Commerce, Bureau of the Census.

businesses. Another 9.5 percent were associated with Office, computing and accounting machines—SIC 357. Again, most (72.8%) of these anticipated jobs resulted from planned expansion of existing businesses rather than new establishments.

***High Tech R&D Sector:*** Oklahoma's high tech R&D sector (indicated by ** in Table 2) consists of just five industries with substantial research and development effort. The Aircraft and parts industry (SIC 372) dominates the sector with over 40 percent of the employment, but it has not been the fastest growing. That distinction goes to Office, computing and accounting machines, which grew at an average annual rate of 13.0 percent. Thus, by 1987 it accounted for almost 38 percent of the sector's employment. As noted before, the Communication equipment industry lost a substantial number of workers.

It is perhaps noteworthy that actual employment in these key industries may have risen only very modestly, but it did rise in the aggregate during this long period of economic stagnation. Between 1983 and 1988, job announcements in these industries accounted for 26 percent of all manufacturing announcements, whereas high tech R&D sector employment currently accounts for 12 percent of manufacturing employment. Substantial announcements were made in three of the sectors—Aircraft and parts, Communication equipment and Office, computing and accounting machines. Most (86.8 percent) of the jobs announced related to expansion of existing businesses even in these technology- and knowledge-based industries.

When actual job changes and new job announcement data are compared, we note that Communication equipment firms reported new jobs related to investment in existing establishments for nearly 3,500 workers even as actual employment declined by nearly 2,600. Aircraft and parts firms reported over 4,000 new jobs while, in fact, employment declined by over 1,100. In the computer and office machines field, actual employment grew by nearly 3,900 compared to a level of job announcements of only 1,100. It is obviously difficult and risky to relate job announcements and intentions, necessarily reported on a gross basis of only job additions, to the net changes of actual employment and dislocations of the workforce.

***Technology-Based Sector:*** The locally most significant additional industries which employ relatively large numbers of scientific and technical employees include Crude petroleum and natural gas (SIC 161); Heavy Construction, except highway and street (SIC 162); a few selected manufacturing industries; and several industries in the Transportation, Communications and Public Utilities, Wholesale Trade, and Services sectors.

The two largest industries added in this sector are Crude petroleum and natural gas (SIC 131) and Wholesale trade of machinery, equipment and supplies (SIC 508). In 1982, these two industries contained nearly 35 percent of all technology-based employment. Yet, despite dramatic drops in employment between 1982 and 1987, these industries remained the largest employers even as their contributions fell to 28.5 percent of technology-based employment.

Other large industries added in this sector include Tires and inner tubes (SIC 301); Construction, mining and material handling machinery (SIC 353); General industrial machinery (SIC 356); Motor vehicles and parts (SIC 371); and service sector industries including Radio and TV broadcasting, Electric services, Wholesale trade of electrical goods, Computer and data processing services, and Engineering, architectural, and surveying services.

The two nonmanufacturing sectors which are frequently counted as high tech sectors include Research and development laboratories (SIC 7391), which is small but extremely fast growing in the state, and Computer and data processing services (SIC 737), which has over 3,000 workers and a growth rate for the period exceeding 7.0 percent per year.

Overall, employment in the technology-based industries fell at an average annual rate of nearly 5.0 percent for the 1982-1987 period. Since this loss was substantially greater than for the high technology manufacturing industries, for all nonagricultural employment and for all manufacturing industries, this category of employment fell relative to all others.

It should be noted, however, that much of the decline in the technology-based employment can be associated with a small number of large industries, most of which are associated with the oil industry. Crude petroleum and natural gas lost 16,000 workers; Wholesale trade of machinery, equipment and supplies including oil field equipment lost 12,000 workers; Construction, mining, and material handling machinery, including oil field equipment lost 8,500 workers; and Heavy construction, except highways and streets lost 5,500 workers. Together, these four industries accounted for 98 percent of the net job loss of 43,000 workers in the total classification.

Over the same period, the expanded set of *manufacturing industries* in the technology-based industries performed in a manner slightly superior to all manufacturing industries combined. Average annual employment declines in the manufacturing portion of the technology-based industries were 2.9 percent compared to 3.1 percent for all manufacturing sectors.

In terms of manufacturing industry job announcements, the enlarged technology-based sector accounted for just over one-half of all such anticipated activity. The seven sectors accounting for 80 percent of these job announcements include: Aircraft and parts (4,214); Communication equipment (3,632); Construction, mining, and material handling machinery (2,133); Motor vehicles and equipment (1,205); Office, computing and accounting machines (1,102); Tires and tubes (1,048); and General industrial machinery (1,048). The actual employment change in these sectors between 1982 and 1987 was a loss of 7,200 workers in the face of substantial gains and losses in the individual industries.

## Conclusions

Despite, or perhaps because of, the long period of sectoral recession in Oklahoma's traditionally dominant industries related to oil and gas field activity, the period from 1982 to 1987 can be characterized as one of substantial turnover and reallocation along with the generally broad and substantial decline in the overall manufacturing sector. As one looks year-by-year at *new plant* announcements where announced job growth expectations exceed 100 workers, the list includes such industries as computer disks (in 1983), computer terminals (in 1984), oil field pumps and large scale disk storage units (in 1985), methanol ether and subsurface oil pumps (in 1986), canister bomb casings (in 1987), and air conditioning equipment, industrial hazardous waste and recycling equipment, heat pumps and airplane overhaul (in 1988). Here, as in the much more numerous job announcements for *plant expansions* planned for 100 new workers or more, a mix of the high technology and more traditional resource-based industries can be found. High technology industries generally do appear to be somewhat more active in job turnover and creation, but this activity is certainly not to the exclusion of recruitment and expansion in selected lines of the more traditional sectors.

While no definitive analysis explaining the observed pattern of high technology industrial growth in Oklahoma will be attempted here, it is interesting to inquire whether patterns of adjustment to international activity over the past 15 years can be related to local growth and diversification.[5] Statewide efforts at such export promotion and international investment recruitment have certainly been intensified in response to awareness of these linkages. (Lage, 1988)

Table 1 records the general results of the pattern of international influence on the major manufacturing sectors. Import competition has grown continuously throughout the period from 1974 to 1986 so that imports relative to new supply of imports and domestic production now stand at record high levels. Export growth was fairly strong in the late 1970s; however, in most cases, export sales fell substantially as a proportion of domestic production from 1980 to 1986 as the value of the dollar in international exchange climbed to very high levels through February of 1985 and the rest of the developed market economies went through a severe recessionary period in the early 1980s.

When actual 1982-1987 job changes in Oklahoma technology-based manufacturing industries are correlated with changes in the share of imports to new supply and the share of exports to domestic shipments, the only substantial positive relationship is with recent export changes. The correlation of job changes (mostly losses) from 1982 to 1987 with the decline in export shares from 1980 to 1986 is +0.44. (The change in the number of establishments from 1982 to 1986 also correlates with the 1980-1986 export pattern with a coefficient of +0.46. Other correlations of Oklahoma employment growth to changes in import or export shares are generally less than 0.1 and of mixed signs.) Evidently, no generally applicable explanation of the pattern of high tech employment change in Oklahoma can be observed from import and/or export competition alone.

Finally, a last word of caution is in order regarding any use of the job announcement data of the Oklahoma Department of Commerce to infer actual patterns of employment change measured by more traditional concepts and procedures of the census process. The measured correlation between the actual job changes from 1982 to 1987 in the U.S. Department of Commerce, Bureau of Economic Analysis, series on full and part-time jobs in the technology-based manufacturing sectors and the job announcements over the 1983 to 1988 reporting periods is a *negative* 0.3. Job announcements must be taken (as advertised) as simply an indication of current local economic development flux and not as a predictor of potential net employment change.

## Notes

[1] Establishments in these four industries accounted for over 60 percent of employment in the high technology sector.

[2] The announcements do highlight the importance of job expansions for economic development as they accounted for 65 percent of the anticipated job additions in manufacturing sector.

[3] The latter industry (SIC 376) shows no Oklahoma employment and is therefore frequently omitted from the list.

[4] Because of the lack of job announcement data, two non-manufacturing industries typically associated with this sector are not included here—SIC 737, Computer and Data Processing Services, and SIC 7391, Research and Development Laboratories.

[5] See Martinez, 1988, for a statement of product cycle theory concluding that rural areas may be competitive in attracting high technology industries only after a period of time when both product and process technology has become standardized and, therefore, open to severe international cost-cutting competition as well.

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# OKLAHOMA BUSINESS BULLETIN

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## SUMMARY OF INDICATORS

| Category | 7 Mos. '89 | 7 Mos. '88 | July '89 | Percentage Change 7 Mos. '89/'88 | Percentage Change July/June '89 |
|---|---|---|---|---|---|
| **Personal Income (Monthly Average)** | | | | | |
| Unadjusted ($000,000) | 3,798 | 3,568 | 3,865 | 6.4 | 0.8 |
| Adjusted for CPI ($000,000) | 3,090 | 3,050 | 3,107 | 1.3 | 0.5 |
| **Crude Oil Production (000 bbl)**[a] | 54,742 | 60,691 | 8,776 | -9.8 | -5.8 |
| **Natural Gas Production (000 mcf)**[a] | 1,042,658 | 1,058,813 | 175,099 | -1.5 | -0.5 |
| **Industrial Power Sales (000,000 Kwh)**[b] | 5,044 | 4,887 | 748 | 3.2 | -1.1 |
| **Total Bank Deposits (Monthly Average) ($000,000)**[c] | | | | | |
| Demand | 7,443 | 7,591 | 7,351 | -2.0 | 1.2 |
| Savings | 23,549 | 24,538 | 23,441 | 0.2 | -4.0 |
| **Savings and Loan Associations ($000,000)** | | | | | |
| Assets | 10,746 | 10,298 | 10,650 | 4.4 | -0.4 |
| Mortgage Loans Closed | 291 | 363 | 40 | -19.8 | -5.6 |
| **Employment** | | | | | |
| Total Labor Force (000)[d] | 1,524.4 | 1,532.6 | 1,568.8 | -0.5 | 1.4 |
| Total Employment (000) | 1,430.7 | 1,424.3 | 1,481.1 | 0.4 | 1.5 |
| Unemployment Rate (%) | 6.2 | 7.0 | 5.6 | — | — |
| Wage and Salary Employment (000) | 1,137.9 | 1,127.2 | 1,135.9 | 0.9 | -0.7 |
| **General Business Index** | 95.6 | 94.5 | 98.4 | 1.2 | 2.4 |

Note: Includes revisions.

[a] Natural Gas includes casinghead gas, 6 months and June data.

[b] Sales of larger privately owned utility companies.

[c] Total deposits of all depository institutions.

[d] Civilian Labor Force.

## RETAIL TRADE IN SELECTED CITIES
($000)

| City | July '89 Adjusted | July '89 Unadjusted | Adjusted '89/'88 7 Mos. | Adjusted 1989 July/June |
|---|---|---|---|---|
| Ada | 13,516 | 13,887 | -0.5 | -1.2 |
| Altus | 11,930 | 13,023 | -4.9 | 1.5 |
| Alva | 3,760 | 3,930 | -5.0 | 6.5 |
| Anadarko | 5,238 | 5,346 | -2.2 | 20.6 |
| Ardmore | 18,474 | 19,893 | -4.0 | -0.3 |
| Bartlesville | 18,809 | 20,168 | 0.3 | -1.0 |
| Blackwell | 3,346 | 3,551 | -6.0 | 4.8 |
| Broken Arrow | 20,032 | 21,039 | -0.3 | 3.4 |
| Chickasha | 8,952 | 9,157 | -4.6 | -0.9 |
| Clinton | 6,270 | 6,870 | -4.6 | 3.5 |
| Cushing | 5,109 | 5,140 | -6.8 | 13.2 |
| Del City | 9,971 | 10,669 | -4.7 | 1.5 |
| Duncan | 13,435 | 14,331 | -10.4 | -1.8 |
| Durant | 10,373 | 10,942 | -4.6 | 0.7 |
| Edmond | 26,573 | 27,796 | 3.2 | 5.7 |
| Elk City | 7,398 | 8,154 | -2.8 | 0.0 |
| El Reno | 7,931 | 8,131 | 1.5 | 2.5 |
| Guthrie | 4,078 | 4,279 | -3.9 | -16.1 |
| Guymon | 4,559 | 4,700 | 0.8 | 3.7 |
| Henryetta | 4,946 | 5,286 | -3.8 | 8.6 |
| Hobart | 2,143 | 2,277 | -5.9 | -0.5 |
| Holdenville | 2,376 | 2,549 | -7.8 | -5.5 |
| Hugo | 2,549 | 2,713 | -5.0 | -5.9 |
| Idabel | 3,696 | 3,979 | -1.5 | 0.6 |
| Lawton | 46,079 | 48,725 | -4.7 | 1.2 |
| McAlester | 9,692 | 10,311 | -5.2 | 1.5 |
| Miami | 10,705 | 11,011 | -4.8 | -2.5 |
| Midwest City | 34,675 | 34,755 | -4.2 | 1.3 |
| Moore | 12,258 | 12,502 | -10.1 | 3.3 |
| Muskogee | 28,815 | 30,121 | -0.9 | 2.0 |
| Norman | 60,205 | 61,601 | -3.3 | -3.7 |
| Oklahoma City | 257,231 | 264,303 | -2.5 | -3.0 |
| Okmulgee | 5,187 | 5,629 | -4.7 | 4.2 |
| Pauls Valley | 4,356 | 4,527 | -2.6 | 5.6 |
| Pawhuska | 1,856 | 1,869 | -0.6 | 6.0 |
| Ponca City | 16,907 | 17,860 | 1.9 | 0.9 |
| Poteau | 4,249 | 4,547 | -4.6 | -3.5 |
| Sand Springs | 8,980 | 9,450 | 1.8 | 4.3 |
| Sapulpa | 12,713 | 13,378 | -1.4 | 1.9 |
| Seminole | 5,721 | 5,884 | -6.2 | 3.5 |
| Shawnee | 26,596 | 27,043 | 2.5 | 0.3 |
| Stillwater | 24,276 | 23,840 | -1.2 | 2.2 |
| Tahlequah | 7,485 | 8,152 | -1.8 | 1.7 |
| Tulsa | 244,358 | 249,928 | -1.4 | -0.6 |
| Watonga | 1,990 | 2,027 | 4.0 | 19.3 |
| Weatherford | 5,470 | 5,704 | -1.2 | -4.1 |
| Wewoka | 1,108 | 1,162 | -5.4 | 5.7 |
| Woodward | 10,875 | 11,688 | -3.6 | 0.3 |
| **Total** | 1,057,251 | 1,093,827 | -2.3 | -0.4 |

## RETAIL TRADE IN METRO AREAS AND STATE
($000)

| | | | | | Percentage Change | | |
|---|---|---|---|---|---|---|---|
| | 7 Mos. '89 | 7 Mos. '88 | July '89 | | 7 Mos. '89/'88 | July/June '89 | |
| Retail Trade | Adjusted | Adjusted | Adjusted | Unadjusted | Adjusted | Adjusted | Unadjusted |
| **OKLAHOMA CITY MSA** | | | | | | | |
| Food Group | 1,447,031 | 1,330,315 | 226,443 | 229,062 | 8.8 | 6.1 | 4.0 |
| Apparel | 101,559 | 101,638 | 15,206 | 13,215 | -0.1 | -1.0 | -5.7 |
| General Merchandise Group | 451,390 | 439,226 | 58,220 | 51,607 | 2.8 | -13.0 | -22.8 |
| Furniture & Appliances | 157,429 | 137,338 | 20,735 | 20,061 | 14.6 | -7.7 | -9.8 |
| Lumber & Building Materials | 92,097 | 103,736 | 12,139 | 13,760 | -11.2 | -3.1 | -9.3 |
| Auto Dealers | 915,166 | 1,084,315 | 119,950 | 134,658 | -15.6 | -4.5 | -5.4 |
| Service Stations | 129,732 | 119,315 | 18,564 | 20,045 | 8.7 | -1.3 | -0.2 |
| All Other | 422,743 | 443,826 | 63,910 | 59,737 | -4.8 | 6.7 | -3.0 |
| Total | 3,717,147 | 3,759,709 | 535,167 | 542,145 | -1.1 | 0.0 | -3.6 |
| **TULSA MSA** | | | | | | | |
| Food Group | 831,057 | 780,063 | 131,277 | 135,490 | 6.5 | 8.4 | 8.2 |
| Apparel | 88,141 | 94,209 | 13,572 | 11,300 | -6.4 | 1.3 | -8.0 |
| General Merchandise Group | 400,843 | 385,146 | 60,213 | 55,712 | 4.1 | -1.0 | -8.7 |
| Furniture & Appliances | 89,838 | 88,403 | 14,163 | 14,833 | 1.6 | 6.3 | 11.0 |
| Lumber & Building Materials | 82,640 | 76,771 | 10,855 | 12,436 | 7.6 | -8.0 | -10.0 |
| Auto Dealers | 532,483 | 630,899 | 69,792 | 78,350 | -15.6 | -4.5 | -5.4 |
| Service Stations | 106,585 | 98,026 | 15,252 | 16,469 | 8.7 | -1.3 | -0.2 |
| All Other | 73,249 | 78,884 | 8,707 | 9,011 | -7.1 | -23.0 | -27.1 |
| Total | 2,204,836 | 2,232,401 | 323,831 | 333,601 | -1.2 | 1.1 | -1.1 |
| **ENID MSA** | | | | | | | |
| Food Group | 68,309 | 64,315 | 9,857 | 10,390 | 6.2 | -5.4 | -5.3 |
| Apparel | 9,368 | 9,499 | 1,317 | 1,410 | -1.4 | -5.3 | 8.5 |
| General Merchandise Group | 29,801 | 29,689 | 4,410 | 4,179 | 0.4 | -0.4 | -2.1 |
| Furniture & Appliances | 6,989 | 7,381 | 931 | 911 | -5.3 | -3.4 | -0.2 |
| Lumber & Building Materials | 9,666 | 9,068 | 1,501 | 1,922 | 6.6 | 7.0 | 23.5 |
| Auto Dealers | 52,373 | 62,061 | 6,864 | 7,706 | -15.6 | -4.5 | -5.4 |
| Service Stations | 9,563 | 8,793 | 1,369 | 1,478 | 8.8 | -1.3 | -0.1 |
| All Other | 20,524 | 20,337 | 2,766 | 2,731 | 0.9 | -7.6 | -9.2 |
| Total | 206,593 | 211,132 | 29,015 | 30,727 | -2.1 | -3.8 | -2.9 |
| **LAWTON MSA** | | | | | | | |
| Food Group | 111,820 | 110,254 | 19,258 | 19,947 | 1.4 | 22.5 | 24.0 |
| Apparel | 12,399 | 12,696 | 1,708 | 1,590 | -2.3 | -7.9 | -14.1 |
| General Merchandise Group | 84,984 | 87,721 | 12,133 | 11,205 | -3.1 | -4.6 | -9.5 |
| Furniture & Appliances | 15,772 | 16,502 | 1,955 | 2,244 | -4.4 | -21.0 | -4.2 |
| Lumber & Building Materials | 9,704 | 10,373 | 1,359 | 1,547 | -6.4 | -7.0 | -5.4 |
| Auto Dealers | 69,803 | 82,701 | 9,149 | 10,271 | -15.6 | -4.5 | -5.4 |
| Service Stations | 6,527 | 6,004 | 934 | 1,008 | 8.7 | -1.4 | -0.2 |
| All Other | 22,154 | 22,116 | 2,997 | 3,448 | 0.2 | 6.5 | 2.0 |
| Total | 333,163 | 348,367 | 49,493 | 51,260 | -4.4 | 4.1 | 3.5 |
| **MUSKOGEE AREA** | | | | | | | |
| Food Group | 80,702 | 74,475 | 11,788 | 12,935 | 8.4 | 1.3 | 7.2 |
| Apparel | 13,674 | 12,115 | 1,993 | 1,940 | 12.9 | -3.0 | 1.8 |
| General Merchandise Group | 28,050 | 28,030 | 4,323 | 4,140 | 0.1 | 0.6 | 2.5 |
| Furniture & Appliances | 8,227 | 6,973 | 1,117 | 1,094 | 18.0 | -9.8 | -13.4 |
| Lumber & Building Materials | 2,698 | 2,542 | 385 | 466 | 6.1 | 5.5 | 5.2 |
| Auto Dealers | 44,022 | 52,166 | 5,768 | 6,476 | -15.6 | -4.5 | -5.4 |
| Service Stations | 8,373 | 7,690 | 1,198 | 1,294 | 8.9 | -1.3 | -0.2 |
| All Other | 19,021 | 20,239 | 2,606 | 2,852 | -6.0 | 5.9 | 1.5 |
| Total | 204,767 | 204,230 | 29,178 | 31,197 | 0.3 | -0.4 | 1.7 |
| **STATE[a]** | | | | | | | |
| **Durable Goods** | 3,331,467 | 3,788,133 | 450,418 | 491,084 | -12.1 | -2.6 | -4.8 |
| Auto Dealers | 2,286,515 | 2,709,120 | 299,697 | 336,440 | -15.6 | -4.5 | -5.4 |
| Accessory Dealers | 198,072 | 191,989 | 26,916 | 28,746 | 3.2 | -5.9 | -11.3 |
| Total Automotive | 2,484,587 | 2,901,109 | 326,613 | 365,186 | -14.4 | -4.6 | -5.9 |
| Furniture & Appliances | 211,915 | 197,237 | 31,037 | 30,612 | 7.4 | 0.5 | -1.9 |
| Household Appliances | 124,173 | 138,277 | 17,083 | 16,899 | -10.2 | -2.1 | -4.8 |
| Total Furniture and Appliances | 336,088 | 335,514 | 48,120 | 47,511 | 0.2 | -0.4 | -2.9 |
| Lumber and Building Materials | 312,848 | 322,499 | 45,334 | 50,623 | -3.0 | 5.7 | 1.7 |
| Hardware Stores | 39,715 | 38,887 | 5,665 | 5,691 | 2.1 | 1.5 | -10.3 |
| Total Lumber, Building Materials & Hardware | 352,563 | 361,386 | 50,999 | 56,314 | -2.4 | 5.2 | 0.3 |
| **Nondurable Goods** | 6,522,803 | 6,209,073 | 1,005,547 | 999,224 | 5.1 | 6.7 | 3.2 |
| Apparel | 344,560 | 350,473 | 50,527 | 46,106 | -1.7 | -1.6 | -2.6 |
| Drug Stores | 301,919 | 286,968 | 42,507 | 40,100 | 5.2 | 0.5 | -1.9 |
| Eating and Drinking Places | 1,155,487 | 1,093,040 | 171,162 | 180,120 | 5.7 | 0.5 | -0.5 |
| Food Group | 2,662,027 | 2,514,797 | 432,890 | 440,036 | 5.9 | 14.3 | 12.6 |
| Service Stations | 426,014 | 391,773 | 60,962 | 65,826 | 8.7 | -1.3 | -0.2 |
| General Merchandise Group | 1,223,055 | 1,145,177 | 175,904 | 161,198 | 6.8 | -1.3 | -7.1 |
| **Total Retail Trade** | 9,854,270 | 9,997,206 | 1,455,965 | 1,490,308 | -1.4 | 3.6 | 0.4 |

[a] Total includes data for categories not shown in the table.

## ENID AND LAWTON MSAs
## MUSKOGEE MA

| Category | 7 Mos. '89 | 7 Mos. '88 | July '89 | Percentage Change<br>7 Mos. '89/'88 | Percentage Change<br>July/June '89 |
|---|---|---|---|---|---|
| **ENID MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 28,154 | 29,000 | 29,300 | -2.9 | 2.4 |
| Total Employment | 26,721 | 27,236 | 28,100 | -1.9 | 3.0 |
| Unemployment Rate (%) | 5.0 | 6.1 | 4.2 | — | — |
| Wage and Salary Employment | 21,200 | 21,500 | 21,100 | -1.9 | -0.5 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 638 | 450 | 100 | 41.8 | -28.6 |
| Number of Units | 6 | 5 | 1 | 20.0 | 0.0 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 300 | 0 | 0 | — | 0.0 |
| Number of Units | 6 | 0 | 0 | — | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 1,266 | 467 | 207 | 171.2 | 41.8 |
| Industrial ($000) | 0 | 0 | 0 | 0.0 | 0.0 |
| Institutional ($000) | 0 | 300 | 0 | — | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 5,026 | 1,697 | 654 | 196.2 | 280.9 |
| All Other Nonbuilding ($000) | 143 | 137 | 12 | 4.0 | -79.3 |
| Total Construction ($000) | 7,372 | 3,051 | 972 | 141.6 | 89.3 |
| **LAWTON MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 48,675 | 49,228 | 51,300 | -1.1 | 2.5 |
| Total Employment | 46,200 | 46,307 | 48,950 | -0.2 | 2.6 |
| Unemployment Rate (%) | 5.1 | 5.9 | 4.7 | — | — |
| Wage & Salary Employment | 33,957 | 33,928 | 34,100 | 0.1 | -1.4 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 4,232 | 8,539 | 427 | -50.4 | -46.6 |
| Number of Units | 43 | 111 | 5 | -61.3 | -44.4 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 0 | 180 | 0 | — | 0.0 |
| Number of Units | 0 | 6 | 0 | — | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 1,777 | 2,982 | 5 | -40.4 | -99.1 |
| Industrial ($000) | 191 | 830 | 0 | -77.0 | — |
| Institutional ($000) | 0 | 1,390 | 0 | — | 0.0 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 956 | 1,997 | 389 | -52.1 | — |
| All Other Nonbuilding ($000) | 38 | 0 | 0 | — | — |
| Total Construction ($000) | 7,193 | 15,918 | 821 | -54.8 | -48.6 |
| **MUSKOGEE MA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 31,750 | 31,925 | 31,850 | -0.6 | 0.7 |
| Total Employment | 29,321 | 28,754 | 29,875 | 2.0 | 1.6 |
| Unemployment Rate (%) | 7.7 | 9.9 | 6.2 | — | — |

Note: Includes revisions.

[a] Civilian Labor Force.

Sources for all tables: Local utilities companies; 10th Federal Reserve Bank; Federal Home Loan Bank of Topeka; Oklahoma Employment Security Commission; United States Department of Commerce, Construction Statistics Division; Oklahoma Department of Transportation, Center for Economic and Management Research, College of Business Administration, The University of Oklahoma. The data for all tables were compiled by Marjorie E. Earley, Statistician for CEMR and Brian M. Hickey, Data Analyst.

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**University of Oklahoma**
**Norman, Oklahoma 73019-0450**

## OKLAHOMA CITY AND TULSA MSAs

| Category | 7 Mos. '89 | 7 Mos. '88 | July '89 | Percentage Change<br>7 Mos. '89/'88 | Percentage Change<br>July/June '89 |
|---|---|---|---|---|---|
| **OKLAHOMA CITY MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 491,814 | 498,643 | 507,500 | -1.4 | 2.0 |
| Total Employment | 467,057 | 469,486 | 484,200 | -0.5 | 2.1 |
| Unemployment Rate (%) | 5.0 | 5.8 | 4.6 | — | — |
| Wage and Salary Employment | 406,300 | 406,586 | 403,000 | -0.1 | -1.0 |
| Mortgage Loans Closed ($000,000)[b] | 56 | 63 | 5 | -11.1 | -35.8 |
| **Bank Deposits ($000,000)[c]** | | | | | |
| Demand Deposits | 809 | 815 | 769 | -0.7 | -2.6 |
| Time and Savings Deposits | 1,164 | 1,129 | 1,146 | 3.1 | -0.6 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 66,532 | 66,805 | 9,352 | -0.4 | -22.0 |
| Number of Units | 886 | 949 | 130 | -6.4 | -13.3 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 21,116 | 1,294 | 0 | E | — |
| Number of Units | 482 | 70 | 0 | 588.6 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 17,737 | 38,022 | 1,590 | -53.4 | E |
| Industrial ($000) | 2,479 | 4,029 | 25 | -38.5 | — |
| Institutional ($000) | 55,119 | 10,444 | 48,850 | 427.8 | E |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 17,130 | 54,591 | 4,244 | -68.6 | 97.8 |
| All Other Nonbuilding ($000) | 1,181 | 1,382 | 35 | -14.5 | -69.0 |
| Total Construction ($000) | 181,293 | 176,567 | 64,097 | 2.7 | 291.5 |
| **General Business Index** | 94.9 | 91.6 | 94.5 | 3.6 | -1.4 |
| **TULSA MSA** | | | | | |
| **Employment (Number)** | | | | | |
| Labor Force[a] | 341,928 | 341,214 | 358,300 | 0.2 | 2.9 |
| Total Employment | 319,957 | 314,443 | 338,300 | 1.8 | 3.2 |
| Unemployment Rate (%) | 6.4 | 7.8 | 5.6 | — | — |
| Wage and Salary Employment | 299,486 | 294,886 | 302,800 | 1.6 | -0.1 |
| Mortgage Loans Closed ($000,000)[b] | 102 | 138 | 19 | -26.1 | 14.6 |
| **Bank Deposits ($000,000)[c]** | | | | | |
| Demand Deposits | 934 | 903 | 929 | 16.3 | 0.9 |
| Time and Savings Deposits | 2,089 | 2,158 | 2,089 | -3.2 | 0.1 |
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 84,589 | 65,113 | 10,318 | 29.9 | -16.0 |
| Number of Units | 1,075 | 847 | 143 | 26.9 | -7.8 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 82 | 1,298 | 0 | -93.7 | 0.0 |
| Number of Units | 4 | 56 | 0 | -92.9 | 0.0 |
| Nonresidential | | | | | |
| Commercial ($000) | 16,934 | 44,204 | 1,272 | -61.7 | -26.7 |
| Industrial ($000) | 12,594 | 12,552 | 1,431 | 0.3 | 477.1 |
| Institutional ($000) | 11,412 | 9,200 | 871 | 24.0 | 126.6 |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 25,385 | 22,937 | 5,922 | 10.7 | -27.1 |
| All Other Nonbuilding ($000) | 2,214 | 2,595 | 582 | -14.7 | 105.1 |
| Total Construction ($000) | 153,210 | 157,899 | 20,395 | -3.0 | -11.5 |
| **General Business Index** | 92.7 | 87.6 | 94.6 | 5.6 | -1.6 |

Note: Includes revisions.

E = Exceeds 600 percent.

[a] Civilian Labor Force.

[b] By Savings and Loan Associations.

[c] Total deposits of large commercial banks (accounted for 36 percent of all commercial bank deposits as of December 31, 1988 for Oklahoma City and 54 percent of all commercial bank deposits as of December 31, 1988 for Tulsa).

## CONSTRUCTION, STATE

| Category | 7 Mos. '89 | 7 Mos. '88 | July '89 | Percentage Change<br>7 Mos. '89/'88 | Percentage Change<br>July/June '89 |
|---|---|---|---|---|---|
| **PERMIT-AUTHORIZED CONSTRUCTION** | | | | | |
| Residential—Single Family | | | | | |
| Dollar Value ($000) | 166,693 | 154,594 | 21,033 | 7.8 | -18.9 |
| Number of Units | 2,159 | 2,084 | 288 | 3.6 | -12.5 |
| Residential—Multi Family | | | | | |
| Dollar Value ($000) | 21,498 | 3,753 | 0 | 472.8 | — |
| Number of Units | 492 | 214 | 0 | 129.9 | — |
| Nonresidential | | | | | |
| Commercial ($000) | 49,860 | 94,018 | 4,552 | -47.0 | 18.3 |
| Industrial ($000) | 16,513 | 21,950 | 2,308 | -24.8 | 425.6 |
| Institutional ($000) | 70,601 | 24,123 | 49,721 | 192.7 | E |
| Nonbuilding | | | | | |
| Streets and Highways ($000) | 184,528 | 183,881 | 29,365 | 0.4 | -33.9 |
| All Other Nonbuilding ($000) | 3,792 | 4,326 | 655 | -12.3 | 26.9 |
| Total Construction ($000) | 513,485 | 486,645 | 107,632 | 5.5 | 36.2 |

Note: Includes revisions.　E = Exceeds 600 percent.